DOCUMENT RESUME

ED 048 510 VT 012 891

AUTHOR	Putnam, John F., Comp.; Chismore, W. Dale, Comp.
TITLE	Standard Terminology For Curriculum and Instruction In Local and State School Systems. State Educational Records and Report Series: Handbook VI.
INSTITUTION	National Center for Educational Statistics (DHEW/OE), Washington, D.C.
REPORT NO	OE-23052
PUB DATE	70
NOTE	331p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (HE5.223:23052, $3.00)
EDRS PRICE	EDRS Price MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	*Curriculum, *Definitions, Educational Improvement, *Language Standardization, *Reference Books, Standard Spoken Usage, *Vocabulary

ABSTRACT

Meaningful evaluation of education requires that information reported by different school systems, states, and regions be comparable. The terminology definitions, and classifications of items in this handbook are intended to provide this needed standardization. The handbook identifies and defines or describes those items of information about curriculum and instruction which should be available on a comparable basis throughout the United States. Items are classified by a graduated numbering system under general headings of: (1) a school system, (2) a school, (3) a program of studies, (4) a self-contained class, course, or co-curricular activity, and (5) a section or instructional service activity. (BH)

ED0 48510

STANDARD TERMINOLOGY FOR CURRICULUM AND INSTRUCTION IN LOCAL AND STATE SCHOOL SYSTEMS

State Educational Records
and Reports Series:
Handbook VI

national
center for
educational
statistics

VT012891

COOPERATING ASSOCIATIONS

providing assistance in all parts of the handbook and throughout the project—from inception to completion

American Association of Junior Colleges
American Association of School Administrators
American Personnel and Guidance Association
American Vocational Association, Inc.
Association for Childhood Education International
Association for Supervision and Curriculum Development
Association of Classroom Teachers of the NEA
Council for Exceptional Children
Council of Chief State School Officers
Department of Elementary School Principals of the NEA
National Association for Public School Adult Education
National Association of Secondary School Principals
National School Boards Association, Inc.

State Educational Records and Report Series: Handbook VI

OE–23052

ED0 48510

STANDARD TERMINOLOGY FOR CURRICULUM AND INSTRUCTION IN LOCAL AND STATE SCHOOL SYSTEMS

Compiled and edited in the
Office of Education by
John F. Putnam and
W. Dale Chismore
Specialists in
Educational Records
and Reports

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Elliot L. Richardson, *Secretary*
Office of Education
Terrel H. Bell, *Acting Commissioner of Education*

National Center for Educational Statistics
Dorothy M. Gilford, *Assistant Commissioner for Educational Statistics*

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

Superintendent of Documents Catalog No. HE 5.223:23052
U.S. Government Printing Office
Washington: 1970

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402—Price $3.00 (paper cover)

4

Foreword

Standard Terminology For Curriculum and Instruction in Local and State School Systems presents a basis for describing curriculum and instruction in elementary, secondary, junior college, and adult education in the United States. The terminology, definitions, and classifications of items in this handbook—representing, in effect, a language of communication—are the result of 5 years of cooperative effort by some 70 national organizations and the Office of Education. During this time, handbook development activities involved hundreds of educators and noneducators representing all geographical areas of the United States and great diversity in responsibility, experience, and preparation.

Undertaken at the request of a number of national organizations, this handbook is the sixth in the State Educational Records and Reports Series. Handbook I, "The Common Core of State Educational Information," *was published by the Office of Education in 1953. Handbook II,* "Financial Accounting for Local and State School Systems," *and Handbook III,* "Property Accounting for Local and State School Systems" *were completed in 1957 and 1959, respectively. A handbook about employed personnel, Handbook IV,* "Staff Accounting for Local and State School Systems," *published in in 1965, was developed concurrently with Handbook V,* "Pupil Accounting for Local and State School Systems," *published in 1964.*

Preliminary work on Handbook VI—the handbook of terminology about curriculum and instruction—was initiated in 1959. After 6 months of research activity, OE personnel on this project were transferred temporarily to another project. Later, another year of research activity preceded the Policy Meeting, the first official conference of the handbook project.

Convening at the invitation of the U.S. Commissioner of Education in April 1964, a policy committee—comprising the executive secretaries of 13 cooperating organizations—identified the project's prime purpose as the development of a manual of items of information about curriculum and instruction which are needed for the operation of local schools and which will provide guidance for wording information requests from State education agencies and the Office of Education. Agreement was reached on the overall plan for conducting the project and the role each organization was to assume.

This handbook was developed through a series of conferences in accordance with the plan agreed upon by the policy committee. Representatives to the three national conferences and nine regional meetings were selected by the 13 cooperating organizations through their executive secretaries. Decisions reached at all meetings were those of the representatives of the associations. The function of Office of Education personnel was to do the initial research, coordinate the content of this handbook with other handbooks of the series, edit handbook drafts, prepare for and conduct meetings, and provide the best information possible for the use of conference participants in reaching sound decisions. At each step in the project the Office of Education handbook personnel consulted with appropriate specialists—within and outside the Office of Education—for their reactions and suggestions.

The overall project plan was set into motion on May 20 and 21, 1964, at the National Planning Conference of representatives of the 13 original organizations plus the Research Division of the National Education Association. These representatives determined the general scope and content of the handbook of terminology about curriculum and instruction.

Office of Education staff members developed the first preliminary draft of the handbook following the guidelines established at the planning conference and utilizing the results of their own study of forms and manuals used in the 50 States and in more than 200 local school systems.

The first draft was subjected to critical examination at a Technical Conference in March 1965, as six persons representing various cooperating organizations met with the Office of Education staff for 5 days. As a result of this meeting, the handbook was structured to reflect the organization, administration, content, resources, and processes of instruction.

Eighteen ad hoc committees met between June 1965 and June 1966 to analyze and refine substantive content that would be descriptive of the various subject-matter areas as appropriate to elementary, secondary, junior college, and adult education. These committees involved 216 specialists representing local school systems, State departments of *education, colleges and universities, business and industry, labor, the Office of Education, and others.*

The work of the Technical Conference and the ad hoc committees was incorporated into the second draft of the handbook, which was reviewed in August 1966 at the National Review Conference. This 4-day, item-by-item review by representatives of the 13 cooperating organizations and the NEA Research Division readied the document for use at a series of nine regional meetings.

Three-day Regional Conference were held during June and July 1967 at Boston, Mass.; Washington, D.C.; Atlanta, Ga.; Columbus, Ohio; Des Moines, Iowa; Dallas, Tex.; Salt Lake City, Utah, Billings, Mont.; and San Francisco, Calif. These meetings brought together 141 representatives of the 13 original organizations, who studied the handbook draft intensively and made recommendations to improve it for meeting the wide variations in needs and practices across the country. On most items there was general agreement. The comparatively few issues on which differences of opinion existed were submitted, as appropriate, to the ad hoc committees, professional organizations, and qualified specialists for recommendations before becoming topics for consideration at the National Completion Conference.

The National Completion Conference was held March 10–12, 1969. A majority of its participants, selected by the executive secretaries of the 13 organizations involved in all phases of the project, had taken part also in the earlier National Review Conference. At this concluding 3-day meeting, issues were resolved and final decisions were made on the organization and content of the handbook.

The final draft was completed and duplicated in the spring of 1969, and copies were distributed to all 76 participating organizations. Subsequently, each of the 13 cooperating organizations providing continual guidance and assistance from the inception of the project to its completion officially approved the handbook as the basic guide for items of information about curriculum and instruction to be used in the local and State school systems of the United States. Further, they recommended that Federal, State, and local agencies effect its use as promptly as feasible.

It is anticipated that, at some future date, it will be necessary to reappraise all items and definitions in this handbook in light of the experience gained through implementation and usage. Through such action, the value of this handbook may be maintained.

Everett M. Woodman

President, American Association of Junior Colleges

Sue Arbuthnot

President, Association for Childhood Education International

Arnold W. Salisbury

PRESIDENT, American Association of School Administrators

Alexander Frazier

PRESIDENT, Association for Supervision and Curriculum Development

Merle M. Ohlsen

PRESIDENT, American Personnel and Guidance Association

Bruce P. Eckman

PRESIDENT, Association of Classroom Teachers, NEA

Bernard A. Shilt

PRESIDENT, American Vocational Association, Inc.

John W. Kidd

PRESIDENT, Council for Exceptional Children

Byron W. Hansford

PRESIDENT, Council of Chief State School Officers

Curtis Johnson

PRESIDENT, National Association of Secondary School Principals

Andrew J. Mitchell

PRESIDENT, Department of Elementary School Principals, NEA

Boardman W. Moore

PRESIDENT, National School Boards Association, Inc.

Clyde Weinhold

PRESIDENT, National Association for Public School Adult Education

Allan R. Lichtenberger

DIRECTOR, Educational Data Standards Branch, Office of Education

Dorothy M. Gilford

Assistant Commissioner for Educational Statistics,
Office of Education

Acknowledgments

Grateful acknowledgment is extended to the organizations listed below for their contributions to this cooperative project. The names of individuals taking part at conferences are listed in the appendix.

Alexander Graham Bell Association for the Deaf, Inc.
American Association for Health, Physical Education, and Recreation
American Association of Instructors of the Blind
American Association of Junior Colleges
American Association of School Administrators
American Association of School Librarians of the ALA
American Association on Mental Deficiency
American Classical League
American Economic Association
American Federation of Teachers
American Foundation for the Blind
American Historical Association
American Hospital Association
American Industrial Arts Association, Inc.
American Mathematical Society
American Musicological Society
American Personnel and Guidance Association
American Political Science Association
American Psychological Association
American Speech and Hearing Association
American Technical Education Association
American Vocational Association, Inc.
Association for Childhood Education International
Association for Supervision and Curriculum Development
Association of Classroom Teachers of the National Education Association
Association of School Business Officials of the United States and Canada
Bureau of the Census, U.S. Department of Commerce
Children's Bureau, U.S. Department of Health, Education, and Welfare
Commission on Undergraduate Education in the Biological Sciences
Conference of Executives of American Schools for the Deaf
Convention of American Instructors of the Deaf
Council for Exceptional Children
Council for Distributive Teacher Education
Council of Chief State School Officers
Department of Audiovisual Instruction of the NEA

Department of Elementary–Kindergarten–Nursery Education of the NEA
Department of Elementary School Principals of the NEA
Distributive Education Clubs of America
International Reading Association
Joint Council on Economic Education
Mathematical Association of America, Inc.
Modern Language Association of America
Music Educators National Conference (NEA)
National Art Education Association
National Association for Mental Health
National Association for Public School Adult Education
National Association for Retarded Children
National Association for the Education of Young Children
National Association of Distributive Education Teachers
National Association of Secondary School Principals
National Association of State Directors of Special Education
National Association of State Supervisors for Distributive Education
National Business Education Association
National Catholic Educational Association
National Commission on Safety Education (NEA)
National Council for Geographic Education
National Council for the Social Studies
National Council of Teachers of English
National Council of Teachers of Mathematics
National Health Council
National Rehabilitation Association
National School Boards Association, Inc.
National Science Teachers Association
National Society for Crippled Children and Adults
National Society for the Prevention of Blindness, Inc.
National Study of Secondary School Evaluation
Office of Economic Opportunity
Office of the Assistant Commissioner for Education, Bureau of Indian Affairs, U.S. Department of the Interior
Office of Education, U.S. Department of Health, Education, and Welfare
Public Health Service, U.S. Department of Health, Education, and Welfare
Research Division, National Education Association
Speech Association of America
United Business Schools Association
U.S. Department of Agriculture
U.S. Department of Defense
U.S. Department of Labor, Manpower Administration, U.S. Training and Employment Service

Contents

Page

Foreword iii
Acknowledgments vii

CHAPTER 1. **Introduction** 1

Handbook Series 1
Benefits of Standardized Information About Curriculum and Instruction 1
Basic Definitions 3
Content of This Handbook 3
Adapting This Handbook to Local Records and Reports Systems 5

CHAPTER 2. **Collecting and Using Information About Curriculum and Instruction** 6

The Need for Information About Curriculum and Instruction 6
Responsibility for Information About Curriculum and Instruction 6
Principles and Procedures for Planning and Implementing a System of Information About Curriculum and Instruction 8
Development of Records and Reports About Curriculum and Instruction 9
Relating Information About Curriculum and Instruction to Other Areas of Educational Information
Evaluation of Quality 17
Use of Information About Curriculum and Instruction in Research and Experimentation 18

CHAPTER 3. **Classification of Items of Information About Curriculum and Instruction** 20

An Item of Information About Curriculum and Instruction: Definition 20
Recommended and Optional Items 20
Information According to Type of Instructional Program 20
Identification Numbers 20
Items Describing a School System (10000 Series) 20
Items Describing a School (20000 Series) 29
Items Describing a Program of Studies (30000 Series) 42

Page

Items Describing a Self-contained Class, Course, or Cocurricular Activity (40000 Series) 47
Items Describing a Section or Instructional Service Activity (50000 Series) 55

CHAPTER 4. **Definitions of Items of Information About Curriculum and Instruction** 58

Specifications (X 01 00 Series) 58
Identification (X 02 00 Series) 59
Placement (X 03 00 Series) 63
Level of Difficulty or Ability (X 04 00 Series) 65
Approval and/or Accreditation (X 05 00 Series) 65
Time Elements (X 06 00 Series) 66
Evaluation and Curriculum Improvement (X 07 00 Series) 71
Evaluating and Reporting Pupil Progress (X 08 00 Series) 78
Pupils Served (X 09 00 Series) 80
Entrance (X 10 00 Series) 82
Progress and Promotion Practices (X 11 00 Series) 84
Completion Practices (X 12 00 Series) 84
Instruction (X 13 00 Series) 86
Subject Matter (X 21 00 Series) 87
Treatment of Content (X 22 00 Series) 88
Planned Instructional Outcomes for Pupils (X 23 00 Series) 89
Staff Members (X 31 00 Series) 90
Services Supporting Instruction (X 32 00 Series) 90
Community Resources (X 33 00 Series) 96
Location of Instruction (or Service) (X 34 00 Series) 96
Facilities (X 35 00 Series) 97
Instructional Equipment and Supplies (X 36 00 Series) 99
Structure of Program of Studies or Course (X 41 00 Series) 100
Medium of Instruction (or Direction) (X 42 00 Series) 101
Methods of Instruction (or Direction) (X 43 00 Series) 101
Other Procedures for Instruction (or Direction) (X 44 00 Series) 102
Schools (Summary Information) (X 51 00 Series) 103
Facilities (Summary Information) (X 52 00 Series) 103
Programs of Studies (Summary Information) (X 53 00 Series) 103
Services Supporting Instruction (Summary Information) (X 54 00 Series) 103

Page

Pupil Membership (Summary Information) (X 55 00 Series) 104
Staff Members (Summary Information) (X 56 00 Series) 104
Courses (Summary Information) (X 57 00 Series) 104
Cocurricular Activities (Summary Information) (X 58 00 Series) 105
Sections (Summary Information) (X 59 00 Series) 105
Other Information (X 99 00 Series) 105

CHAPTER 5. **Classifications of Items of Information About Subject-Matter Areas and Cocurricular Activities** 106

01. Agriculture 107
02. Art 110
03. Business 111
04. Distributive Education 117
05. English Language Arts 120
06. Foreign Languages 122
07. Health Occupations Education 123
08. Health and Safety in Daily Living, Physical Education, and Recreation 124
09. Home Economics 127
10. Industrial Arts 128
11. Mathematics 130
12. Music 131
13. Natural Sciences 132
14. Office Occupations 134
15. Social Sciences/Social Studies 136
16. Technical Education 140
17. Trade and Industrial Occupations 141
18. General Elementary Education and General Secondary Education 144
19. Differentialized Curriculum for Handicapped Pupils 145

Page

20. Cocurricular Activities 146
21. Safety and Driver Education 148
22. Junior ROTC 149

CHAPTER 6. **Definitions of Items of Information About Subject-Matter Areas and Cocurricular Activities** 153

01. Agriculture 153
02. Art 158
03. Business 160
04. Distributive Education 170
05. English Language Arts 177
06. Foreign Languages 183
07. Health Occupations Education 184
08. Health and Safety in Daily Living, Physical Education, and Recreation 188
09. Home Economics 193
10. Industrial Arts 195
11. Mathematics 199
12. Music 208
13. Natural Sciences 209
14. Office Occupations 213
15. Social Sciences/Social Studies 218
16. Technical Education 223
17. Trade and Industrial Occupations 228
18. General Elementary Education and General Secondary Education 238
19. Differentialized Curriculum for Handicapped Pupils 239
20. Cocurricular Activities 242
21. Safety and Driver Education 246
22. Junior ROTC 248

Glossary 257
Appendix—Acknowledgments 268
Index 284

LIST OF FIGURES AND TABLES

Page

Figure 1—Some aspects of curriculum and instruction and their interrelationships 2
Figure 2—Interrelationships of subject matter with other selected aspects of curriculum and instruction 13
Figure 3—Some interrelationships among areas of information about education 15
Table 1—Broad categories of information, by level of organization 4
Table 2—Curriculum areas of handbook and page numbers on which classifications and definitions begin 4
Table 3—An illustrative sampling of users of information about curriculum and instruction 7
Table 4—Illustrative functions of local schools and school systems requiring information about curriculum and instruction 7

Page

Table 5—Illustrative functions of State education agencies requiring information about curriculum and instruction 7
Table 6—Broad categories of information by level of organization (with page references to chapters 3 and 4) 10
Table 7—Illustrative descriptions of self-contained classes and courses utilizing items of information from instructional program handbook 11
Table 8—Illustrative portion of check list indicating subject matter provided within a school system having elementary and secondary schools only 12
Table 9—Illustrative portion of check list indicating subject matter provided within an elementary school, grades K–8 14
Table 10—Some interrelationships among selected illustrative items of information pertaining to a 400-pupil elementary school 16

1

Introduction

This handbook is a guide for local and State school systems for items of information used in keeping records and making reports about curriculum and instruction. It classifies and defines specific items of information about the organization, administration, content, resources, and processes of curriculum development and instruction and includes additional related terminology. In so doing, the handbook is concerned with terminology for describing curriculum and instruction in *elementary schools, middle schools, secondary schools, junior colleges,*[1] *and adult schools or other adult education organizational arrangements.*[2]

Three basic criteria—need, communication, and reasonableness—were used as guides in the selection of each item for inclusion in this handbook. According to these criteria, *each item provides information that* (*1*) *may be important to and needed by local school systems for the effective operation of their schools;* (*2*) *may be needed for the exchange, reporting, or storage of information about pupils and their studies, staff members and their assignments, and schools and school systems and their approval and accreditation, or for comparisons of information about curriculum and instruction; and* (*3*) *can be collected and maintained as a record with reasonable effort.*

The use of this handbook may provide school officials with guidance in identifying items of information from which to obtain factual and comparative data for developing their own policies and decisions and for more effectively communicating with their publics, their legislative bodies, and educational organizations. The use of these items permits comparability wherever these items are collected, maintained, and reported by local school districts and other units operating schools. In order to achieve such comparability, *collecting* of information should be done on the basis of the definitions included in the handbook, and *reporting* should be done on the basis of the handbook terminology. Thus, these items may provide the foundation for records and reports about curriculum and instruction at the local, State, and national levels, and provide a means for accurately recording, transmitting, and interpreting information about curriculum and instruction.

Handbook Series

This handbook is one of a series of handbooks developed cooperatively to facilitate and improve the collection, maintenance, and reporting of educational information. Handbook I, *The Common Core of State Educational Information,* was published in 1953. It was followed by Handbook II, *Financial Accounting for Local and State School Systems,* in 1957; Handbook III, *Property Accounting for Local and State School Systems,* in 1959; Handbook IV, *Staff Accounting for Local and State School Systems,* in 1965; and Handbook V, *Pupil Accounting for Local and State School Systems,* which was completed in 1964.

The items of information in the various handbooks are interrelated. Many of the definitions of items in this handbook are the same as those developed for others in the series; other definitions have been modified or expanded, as has been indicated for those items included in the glossary. In several portions of this handbook reference is made to items of information in the other handbooks.

Benefits of Standardized Information About Curriculum and Instruction

The consistent use of the terminology in this handbook can help improve the quality of education by facilitating meaningful evaluation, realistic planning, and efficient operation of educational systems throughout the United States. It can result in improved decisionmaking capabilities in areas such as administration, guidance of individual pupils, curriculum improvement, and instruction.

The standardized terminology in this handbook provides a basis by which items of information about curriculum and instruction can be recorded, reported, and studied adequately. When such information is used, records and reports may be prepared with greater speed, accuracy, and flexibility.

---

[1] Defined in chapter 4; see index for page references.

[2] A definition for "adult education" is in the Glossary; for "adult school or other adult education organizational arrangement," on page 61.

Wide use of the items of information in this handbook, accurately recorded at their source, will result in the advantages of—

- a sound basis for describing and evaluating administrative, organizational, and teaching practices;
- a greater quantity of significant information to guide local, State, and national authorities in determining educational needs and policies;
- easier and more reliable reporting to the public on the condition and progress of education;
- ease in utilizing local administrative information in reports to State agencies (facilitated by the use of electronic data processing equipment);
- greater consistency in the kinds of information accompanying pupils who transfer from one school or school system to another or from a

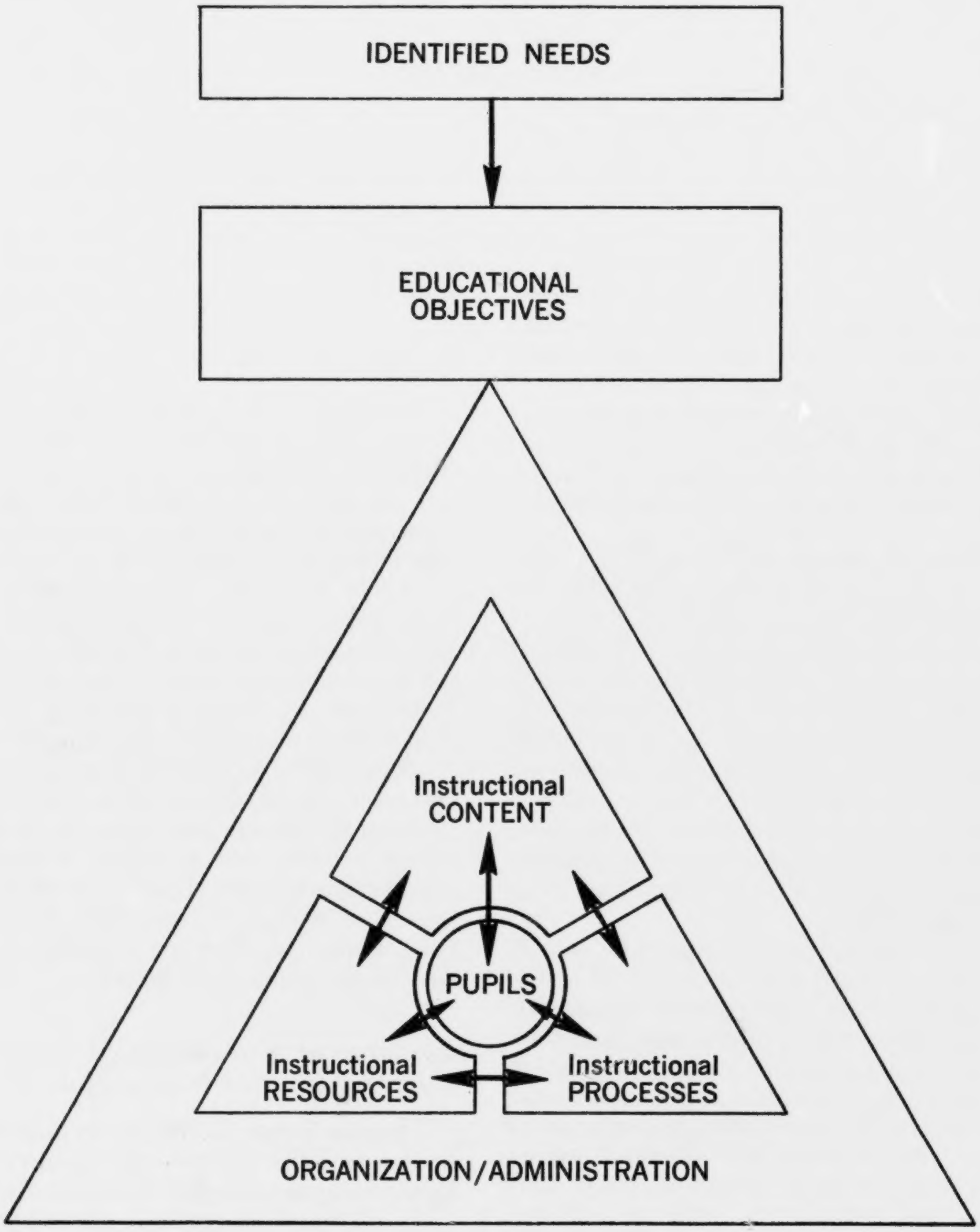

IDENTIFIED NEEDS
EDUCATIONAL OBJECTIVES
Instructional CONTENT
PUPILS
Instructional RESOURCES
Instructional PROCESSES
ORGANIZATION/ADMINISTRATION

Figure 1. — Some aspects of curriculum and instruction and their interrelationships

secondary school to a college or other institution;
- greater comparability of information about instructional programs within the various communities and States;
- greater accuracy in the summaries of information compiled by local, State, and national offices; and
- more favorable conditions for research and use of research data.

In addition, reports based on these standardized items of information will not only reinforce the confidence of their users but also will be more generally applicable and more easily interpreted than reports based on various nonstandard items.

Within a local or State school system, standardized items of information recorded or processed manually may be readily compared and combined with the same standardized items of information processed by automatic data processing systems. Further, the use of standardized items of information is essential to the orderly and efficient conversion from manual to automatic data processing. In such a conversion, the adoption of standard classifications and terminology is a necessary first step, whether a school system plans to initiate or to extend automatic data processing for an individual school or for the entire school system.

Basic Definitions

The term *instructional program* is defined as the totality of the curriculum and its implementation through direct instruction and other means.

The *curriculum* is considered to encompass the instructional activities planned and provided for pupils by the school or school system. The curriculum, therefore, is the planned interaction of pupils with instructional *content*, instructional *resources*, and instructional *processes* for the attainment of educational objectives.

Figure 1 illustrates these relationships. It shows the way in which—
- educational objectives are derived from identified needs;
- an organizational arrangement is developed or utilized for achieving these objectives; and
- pupils are brought into the environment of this organizational arrangement (usually a school) where they interact with the content, resources, and processes of instruction.

Instruction includes the activities dealing directly with the teaching of pupils and with improving the quality of teaching. *Teaching*, the major aspect of instruction, may be provided for pupils in a classroom of a school or in another location such as in a home or hospital; it may be provided by direct pupil-teacher interaction or through some other approved medium such as television, radio, telephone, and correspondence.

Learning is of greatest importance. The purpose of instruction is to enhance learning. The items of information in this handbook, however, were selected to describe that which is provided for pupils in the instructional process rather than that which is acquired by pupils as learning.

In summarizing the meaning of the two terms curriculum and instruction, one might consider that the *curriculum* is *what is taught*, and *instruction* is *how it is taught*.

A *pupil* is defined as an individual for whom instruction is provided in an educational program under the jurisdiction of a school or school system. No distinction is made between the terms *pupil* and *student*; the term pupil is used here to include all individuals receiving instruction.

Other definitions may be located through use of the index.

Content of This Handbook

This handbook provides three principal kinds of information about the standard terminology of curriculum and instruction at various levels in local and State school systems: Items of information about the organization, administration, content, resources, and processes of instruction; the subject matter of the curriculum; and related terminology and other considerations.

Items of information about the organization, administration, content, resources, and processes of instruction are classified in detail in chapter 3 under the following major classes or levels of organization in a graduated numbering system:

ITEMS DESCRIBING A SCHOOL SYSTEM[3]	(1 00 00 Series)
ITEMS DESCRIBING A SCHOOL[4]	(2 00 00 Series)
ITEMS DESCRIBING A PROGRAM OF STUDIES[5]	(3 00 00 Series)
ITEMS DESCRIBING A SELF-CONTAINED CLASS, COURSE, OR CO-CURRICULAR ACTIVITY[6]	(4 00 00 Series)
ITEMS DESCRIBING A SECTION OR INSTRUCTIONAL SERVICE ACTIVITY[7]	(5 00 00 Series)

The items of information are organized within these major classes as illustrated in table 1. (Similar information is shown in table 6, citing page references.)

The definitions shown in chapter 4 are organized according to the categories of information—shown in the left column of table 1—in graduated series or levels of educational organization as shown to the right. The categories are then expanded according

---

[3] See page 20.
[4] See page 29.
[5] See page 42.
[6] See page 47.
[7] See page 55.

Table 1.—Broad categories of information, by level of organization

Category of information	Level of organization (p. 21 ff.)				
	School system	School	Program of studies	Self-contained class, course, or cocurricular activity	Section or service activity
Organization/administration					
Instructional content					
Instructional resources					
Instructional processes					
Summary information					

to the following outline:

Organization/Administration
- 01—Specifications
- 02—Identification
- 03—Placement (grades, years, ages)
- 04—Level of difficulty or ability
- 05—Approval and/or accreditation
- 06—Time elements
- 07—Evaluation and curriculum improvement
- 08—Evaluating and reporting pupil progress
- 09—Pupils served
- 10—Entrance
- 11—Progress and promotion practices
- 12—Completion practices
- 13—Instruction

Instructional Content
- 21—Subject matter
- 22—Treatment of content
- 23—Planned instructional outcomes for pupils

Instructional Resources
- 31—Staff members
- 32—Services supporting instruction
- 33—Community resources
- 34—Location of instruction (or service)
- 35—Facilities
- 36—Instructional equipment and supplies

Instructional Processes
- 41—Structure of program of studies or course
- 42—Medium of instruction (or direction)
- 43—Methods of instruction (or direction)
- 44—Other procedures for instruction (or direction)

Summary Information
- 51—Schools
- 52—Facilities
- 53—Programs of studies
- 54—Services
- 55—Pupil membership
- 56—Staff members
- 57—Courses
- 58—Cocurricular activities
- 59—Sections

Other Information (99)

Items of information about the subject matter of the curriculum are classified in detail in chapter 5; descriptions and definitions are presented in chapter 6. The 22 curriculum areas presented in these chapters are identified, with page references, in table 2.

Table 2.—Curriculum areas of handbook and page numbers on which classifications and definitions begin

Curriculum area	(Chapter 5) Classification on page 107	(Chapter 6) Definitions on page 153
01—Agriculture	107	153
02—Art	110	158
03—Business	111	160
04—Distributive Education	117	170
05—English Language Arts	120	177
06—Foreign Languages	122	183
07—Health Occupations Education	123	184
08—Health and Safety in Daily Living, Physical Education, and Recreation	124	188
09—Home Economics	127	193
10—Industrial Arts	128	195
11—Mathematics	130	199
12—Music	131	208
13—Natural Sciences	132	209
14—Office Occupations	134	213
15—Social Sciences/Social Studies	136	218
16—Technical Education	140	223
17—Trade and Industrial Occupations	141	228
18—General Elementary Education and General Secondary Education	144	238
19—Differentialized Curriculum for Handicapped Pupils	145	239
20—Cocurricular Activities	146	242
21—Safety and Driver Education	148	246
22—Junior ROTC	149	248

It may be noted that the 22 curriculum areas include 20 specific subject-matter areas, one curriculum area devoted to general elementary and general secondary education, and one area to cocurricular activities. Of the 20 specific subject-matter areas, seven are frequently identified as *occupational* areas: agriculture, distributive education, health occupations education, home economics, office occupations, technical education, and trade and industrial occupations.[8]

Thus, this handbook serves primarily to identify and define items of information which can be used to describe aspects of curriculum and instruction. As an aid to using these items, chapter 2 "Information About Curriculum and Instruction" illustrates how these items may be used in developing records and reports. An alphabetical glossary of terms, including measures relating to curriculum and instruction, begins on page 257. The handbook is concluded with an index.

Because it is not devoted to recordkeeping and reporting *systems*, this handbook touches only briefly on procedures for collecting, processing, and using information about curriculum and instruction. Comprehensive materials illustrative of machine or computer programming, data flow charts, collection forms, and card and tape layouts for data processing will be useful to or needed by local school systems and State education agencies when they begin to put this handbook into use.

Adapting This Handbook to Local Records and Reports Systems

The items of information presented and defined in this handbook have been identified as broad and comprehensive enough to describe present practice in planning, operating, and improving curriculum and instruction in most schools and school systems throughout the country. However, the needs for educational information vary from State to State and from school system to school system. This handbook provides for such variation in informational needs through its use of recommended and optional items and through its structure which provides for expansion within categories of information according to local and State requirements.

Provision is made in chapters 3 and 4 for the varying information needs of schools and school systems in the following manner:

> *Recommended items.* It is recommended that a number of items of information about curriculum and instruction *should be collected and maintained* in comparable form for given types of instructional programs in all the school systems where they are applicable.
>
> *Optional items.* A number of additional items are identified which *may be collected and maintained* for given types of instructional programs *at the option of a school or school system.* If collected and maintained, these items should incorporate handbook terms and definitions so that this additional information can be correctly interpreted and so that statistical information about any given school or system will be comparable with similar information about other schools and school systems.
>
> The recommendations of this handbook are not intended to restrict the amount of information maintained. Schools and school systems should maintain whatever additional information they find necessary, maintaining a compatibility with the classifications and definitions of the handbook.
>
> Finally, no item of information in this handbook is intended to take precedence in those situations where items of information of its type are either required or prohibited by law.

Thus, this handbook has been developed as a guide to types of factual and comparative data which school officials at all levels may use in developing their own policies and decisions and in communicating with their publics, their legislative bodies, and educational organizations.

---

[8] A manual has been prepared which relates subject matter in these occupational areas to selected occupations in the *Dictionary of Occupational Titles*. Published jointly by the Department of Labor and the Office of Education in 1969, this publication, entitled *Vocational Education and Occupations*, may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

2

Collecting and Using Information About Curriculum and Instruction

The teaching-learning process is the heart of education. It is for purposes of learning that schools are built, staff members employed, and pupils brought into the classroom. All who guide aspects of the educational enterprise require information about curriculum, instruction, and learning for many purposes including evaluation and decisionmaking.

The terms and definitions of this handbook have been selected primarily according to needs of local school personnel such as superintendents, directors of curriculum, principals, teachers, guidance counselors, and school board members (see criteria on page 1). Many such items collected for local purposes are forwarded to supply the information requirements of the State department of education and others. Ultimately, those requesting information from local school systems are likely to find handbook items to be more readily available for reporting in useable form than similar items not included in the handbook, and handbook items collected from various sources will be more comparable or combinable.

This chapter includes some guidelines and procedures for obtaining and using information chiefly about curriculum and instruction. In brief, the basic steps for strengthening a system or records and reports usually include—

- identifying needs for information;
- establishing responsibility for planning and for obtaining information at the various administrative levels;
- selecting the required items of information, and classifying and describing them;
- planning for the collection and communication of information, including the development of any forms necessary for rapid recording, combining, communicating, interpreting, and utilizing of the data;
- planning for coordination among areas of educational information; and
- implementing the new information system.

The Need for Information About Curriculum and Instruction

The starting point for the development or improvement of an information system is the determination of need. Needs for information about curriculum and instruction should help identify the objectives of the information system; these objectives, in turn, should lead to identification of the items of information required and their priorities.

Among persons and organizations needing information about curriculum and instruction are those having responsibility for operating schools, those providing services for schools and educators, governmental agencies, and segments of the general public, as is illustrated in table 3. They need information for purposes of evaluation, curriculum improvement, scheduling, assisting pupils, reporting, long-range planning, and other administrative functions, as is illustrated in table 4 for local schools and in table 5 for State education agencies.

The availability and use of appropriate and accurate information about curriculum and instruction can greatly enhance the effectiveness of educational decisionmaking locally, statewide, nationally, and regionally.

Responsibility for Information About Curriculum and Instruction

Because information about curriculum and instruction is essential for planning and decisionmaking at all levels of educational administration, the responsibility for obtaining, combining, using, and forwarding appropriate educational information is shared by individual schools, the local school system, the State education agency, and the Office of Education.

This handbook primarily concerns information *about curriculum and instruction*. However, general principles stated here and elsewhere in this chapter may be applied broadly to an entire information system and to limited areas of information within the system as well.

Function and Responsibility of Individual School

Instruction generally takes place within a school. Therefore, most information about curriculum and instruction—for example, information about specific programs of studies, self-contained classes, and courses—originates within schools. This information must be collected accurately in the school, for no amount of manipulation at a later time will assure the accuracy of information not collected properly at its source. The school, therefore, is the most critical point in the information system.

All school staff members involved in collecting, storing, processing, and transmitting information have a vital responsibility for the accuracy of information. The importance of their activity justifies instruction in techniques which help to ensure accuracy.

Table 3.—An illustrative sampling of users of information about curriculum and instruction

Levels of Educational Organization
Local schools and school systems
- Public
- Nonpublic

Intermediate administrative units
State education agencies
U.S. Office of Education

Legislative Bodies
Local governmental units
State legislatures
U.S. Congress

Governmental Agencies
Local welfare agencies
Local employment agencies
Local health departments
State departments of welfare
State employment services
Department of Agriculture
Department of Commerce
(including Bureau of the Census)
Department of Defense
Department of Labor
Department of State
U.S. Civil Service Commission
Other comparable governmental agencies at all levels

The Public
Pupils and pupil organizations
Parents and parents' organizations
Voluntary lay citizens' organizations
Communications media
Researchers and organizations conducting research

Business, Industry, and Labor
Local businesses and industries
Labor organizations
Chambers of Commerce

Associations of Educators
Local associations
State associations
National associations
International associations

Other Institutions and Associations
Accreditation and/or approval agencies
Educational consultant services
Colleges of education
Other colleges and universities
Foundations concerned with education

Table 4.—Illustrative functions of local schools and school systems requiring information about curriculum and instruction

Curriculum improvement:	Evaluating appropriateness of curriculum Evaluating effectiveness of instruction Curriculum research Short- and long-range planning and decisionmaking
Scheduling:	Scheduling courses and sections for pupils Assigning teachers to sections Scheduling sections into rooms
Assisting pupils:	Developing pupil cumulative records Interpreting, preparing, and transmitting transcripts Providing guidance services
Reporting:	To parents To public, community groups, and news media To intermediate administrative unit (as applicable) To State education agency

---

Table 5.—Illustrative functions of State education agencies requiring information about curriculum and instruction

Approval:	Certification of teachers Approval of instructional programs (as applicable) Approval of teacher education programs.
Assisting Schools (including allocating of resources):	Curriculum research and curriculum improvement. Review of curricular offerings Review of enrollments and graduates Projections of enrollments and financial arrangements State financial assistance to local school systems Federal financial assistance to State and local school systems
Reporting:	Reports to legislature and/or governor Reports to U.S. Office of Education Reports to educational associations Reports to news media

Function and Responsibility of Local School System

Personnel at the local school system level of organization generally assume leadership roles in coordinating the efforts of the staffs of the central office and the individual schools in planning and implementing educational information systems. Such coordination facilitates obtaining information for which there is an administrative need or a responsibility.

To design and implement an effective and efficient information system, a school system will find it helpful to carry out the types of activities listed under the last heading on this page. Additionally, many of the activities described below for State education agencies are carried on also within larger school systems. If the information system is to reach full effectiveness in performing such operations, the school system and the schools must have adequate staffing, facilities, and financial support.

Function and Responsibility of State Education Agency

The strategic position of State education agencies puts upon each agency the responsibility for coordinating State and local statistical programs and providing the leadership and technical assistance necessary for planning and implementing a statewide information system.

Planning requires a careful analysis of the existing information system. Current regulations, manuals, procedures, and forms may need to be revised and new materials prepared for local, regional, and statewide consideration. It may be appropriate to initiate the development of a State handbook for information about curriculum and instruction, based on the national handbook.

In their planning, many State agencies arrange to space requests for information from local school systems in order to avoid, so far as possible, excessive demands at any given time. When all the local school systems of a State can and do provide the State agency with comparable information about instructional programs, the State agency can provide the local systems with compiled and interpreted information about instructional programs throughout the State.

The State education agency may help guide and train local school system personnel by means of conferences, written materials, and direct assistance. Conferences may be used to familiarize local personnel with the need for, and details of, the national or State handbook of terminology, to discuss ways and means by which this handbook might most profitably be put into practice in each school system, and to consider revised or new materials based on the handbook. Articles by both local and State personnel dealing with various phases of implementation activities in local school systems may be circulated. Consultative services may be provided for those school systems needing help with specific problems. Pilot projects might be initiated in selected school systems prior to general implementation of the information system throughout the State.

Finally, the State education agency may find it beneficial to enlist the support and cooperation of various local, State, and national professional organizations and of other State governmental agencies that have jurisdiction over segments of the State educational program.

Function and Responsibility of the Office of Education

The ability to evaluate the impact of the total educational system on national resources is essential for guiding national policy. One of the functions of the United States Office of Education is to act as the channel of communications between the Federal Government and the school structure acquainting Federal agencies with the status, capabilities, and needs of the schools, and conversely, interpreting Federal or national needs to the schools.

Since the administration of the schools of the Nation is decentralized the Office of Education is in a strategic position to provide a channel for coordination of educational activities for which the several States have common concern and responsibility. This handbook is one example of how the Office of Education functions in this capacity.

Numerous other activities of the Office of Education are conducted in response to its legal responsibility for reporting on the status and progress of education in the United States. Many of these activities involve relationships with educational agencies within the States, and are similar to those activities mentioned above for State agencies working with their local school systems.

Principles and Procedures for Planning and Implementing a System of Information About Curriculum and Instruction

A fundamental step in the improvement of information about curriculum and instruction at both State and local levels is placing administrative responsibility in the hands of a single person—a person who understands educational as well as technical aspects of educational information systems and who understands the relationships between instructional program information and information in the areas of pupil accounting, staff accounting, property accounting, and financial accounting. His activity should be coordinated with work in other areas of the total system of educational information. His work will be greatly facilitated by the active support of top administrators for any required changes in the information system, and he will require enough competent staff members to plan, supervise, and operate the system. Under his direction, the staff should:

- Identify all needs of the educational system for information about curriculum and instruction, including the uses to which the information will be put.

- Determine the objectives of the information system in light of these informational needs.
- Plan carefully a step-by-step program for collecting, processing, interpreting, storing, and disseminating data, with consideration for requirements of all the various areas of educational information. The plan should be put into writing.
- Make certain that requests for data are necessary, reasonable, and timely and that the information collected can flow readily from local records to reports needed by the administrative officers at any level of organization.
- Select items that are needed to meet informational needs and that suppliers are capable of furnishing. Wherever possible these data items should be described in standard terms to ensure comparability of information among schools of a school system and school systems of a State, thus permitting ready communication and generation of meaningful statistical totals. Items selected should be codable for automatic or electronic data processing.
- Incorporate the data items into appropriate information collection forms. These forms should be easy to understand, easy to fill in, easy to process. The number of forms should be kept to a minimum by limiting the number of duplicating or overlapping requests and by designing forms so that they can be used for more than one purpose.
- Gain the cooperation of all concerned, and attempt to dispel any unwarranted fears or reservations.
- Provide whatever assistance is required by suppliers of data in carrying out their responsibilities.
- Ensure the accuracy of information at its source by helping staff members understand the purposes and importance of the information, impressing local employees with their responsibility for accurate information, and instructing them in the techniques of accurately collecting and processing information.
- Utilize modern methods for processing information, including appropriate devices and procedures; and protect records against inappropriate use and loss through destructive hazards.
- Make the transfer from the old to the new system in a deliberate and careful manner, utilizing, if appropriate, the old and new systems concurrently until the new system is effectively installed.
- Keep records up to date at all times, after the new system has been installed.
- Strive for promptness in forwarding required information to other agencies, making possible early compilation of their reports and thus increasing the timeliness and usefulness of these reports.
- Encourage all who have a stake in the information system—suppliers, collectors, processors, and users of the information—to evaluate continuously its adequacy and effectiveness and to improve it from time to time.

Development of Records and Reports About Curriculum and Instruction

Instruction is the principal activity of the schools. However, while administrators frequently have a quantity of usable information available about the finances and pupils of their schools, they seldom have a comparable amount of useful information about their instructional programs.

This handbook provides a means for describing selected aspects of curriculum and instruction within each of the several levels of organization for instruction, including the school system, individual school, the program of studies, self-contained class or course, cocurricular activity, section, and service activity. For each of these levels there are items or categories of information which may be used, as appropriate, to describe aspects of organization, administration, instructional content, instructional resources, and instructional processes. Table 6 shows where this information may be located in the handbook.

To illustrate the use of table 6, the ninth category of information is "Pupils served." All handbook items about types of pupils served are defined in chapter 4 beginning on page 80 and have the identification number 09. Chapter 3, with an outline of items appropriate for each level of organization, contains items about pupils served by a school (number 20900) on page 37, by a program of studies (number 30900) on page 44, by a given course (number 40900) on page 50, and by a given section of a course (number 50900) on page 57.

Among major handbook categories of information which can be used in describing curriculum and instruction at various levels of organization are the following (including their handbook identification numbers):

	Item number
Items Describing a School System	
Identification of school system	1 02 00.
Type of school system	1 02 41.
Control of school system	1 02 50.
Span of compulsory attendance ages	1 03 11.
Span of grades in school system	1 03 21.
Approval status of school system	1 05 10.
School system time schedule	1 06 00.
Evaluation and curriculum improvement	1 07 00.
School system services supporting instruction	1 32 00.
Summary information about aspects of curriculum and instruction in schools and their programs of studies	
Items Describing an Individual School	
Identification of school	2 02 00.
Type of school	2 02 42.
Span of grades in school	2 03 21.
Accreditation and/or approval status	2 05 00.
School time schedule	2 06 00.
Evaluation and curriculum improvement	2 07 00.
Evaluating and reporting pupil progress	2 08 00.
Types of pupils served	2 09 00.
Requirements for entrance into school	2 10 10.

Table 6.—Broad categories of information by level of organization (with page references to chapters 3 and 4)

Category of information	Definition page No. (chapter 4)	Level of organization (chapter 3)				
		1XX00. School system	2XX00. School	3XX00. Program of studies	4XX00. Self-contained class, course, or cocurricular activity	5XX00. Section or service activity
Organization administration:						
01—Specifications	58	---------	---------	---------	48	56
02—Identification	59	21	29	43	48	56
03—Placement (grades, years, ages)	63	22	30	---------	48	56
04—Level of difficulty/ability	65	---------	---------	---------	48	56
05—Approval/accreditation	65	23	30	43	48	---------
06—Time elements	66	23	31	43	49	56
07—Evaluating and curriculum improvement	71	24	33	44	49	---------
08—Evaluation and reporting pupil progress	78	---------	35	44	49	57
09—Pupils served	80	---------	37	44	50	57
10—Entrance	83	---------	37	45	50	57
11—Progress and promotion	84	---------	37	---------	---------	---------
12—Completion practices	84	---------	38	45	50	57
13—Instruction	86	27	---------	---------	---------	57
Instructional content:						
21—Subject matter	87	---------	---------	46	51	---------
22—Treatment of content	88	---------	---------	---------	51	---------
23—Instructional outcomes	89	---------	---------	46	51	57
Instructional resources:						
31—Staff members	90	---------	---------	---------	52	57
32—Services supporting instruction	90	27	39	---------	---------	---------
33—Community resources	96	28	42	---------	---------	---------
34—Location of instruction	96	---------	42	46	52	57
35—Facilities	97	---------	42	---------	52	57
36—Equipment and supplies	99	---------	---------	46	53	---------
Instructional processes:						
41—Structure	100	---------	42	46	54	---------
42—Medium of instruction	101	---------	---------	---------	54	57
43—Methods of instruction	101	---------	---------	---------	54	57
44—Other procedures for instruction	102	---------	---------	---------	55	---------
Summary information:						
51—Schools	103	29	---------	---------	---------	---------
52—Facilities	103	29	---------	---------	---------	---------
53—Programs of studies	103	29	42	---------	---------	---------
54—Services supporting instruction	103	29	---------	46	---------	---------
55—Pupil membership	104	29	42	47	55	---------
56—Staff members	104	29	42	47	55	---------
57—Courses	104	---------	42	47	---------	---------
58—Cocurricular activities	105	---------	42	47	---------	---------
59—Sections	105	---------	---------	---------	55	---------
Other information (99)	105	29	42	47	55	57

NOTE.—The 2 numbers preceding headings under "category of information" provide the basis for locating items of information in chapter 4; inserting these two numbers in place of "XX" in the numbers under "level of organization" generates new numbers which are the basis for locating items in chapter 3.

	Item number
Requirements and recognition for graduation or completion	2 12 00.
School services supporting instruction	2 32 00.
Summary information about aspects of curriculum and instruction in programs of studies, courses, and cocurricular activities provided by the school	
Items Describing a Program of Studies	
Identification of program of studies	3 02 00.
Type of program of studies	3 02 43.
Type of occupational program	3 21 43.
Area(s) of major specialization	3 21 41.
Area(s) of minor specialization	3 21 42.
Accreditation and/or approval status	3 05 00.
Pupils served by program of studies	3 09 00.
Requirements for entrance into program of studies	3 10 10.
Requirements and recognition for successful completion	3 12 00.
Summary information about courses in program of studies, related cocurricular activities, related services, and staff members involved	

	Item number
Items Describing a Self-contained Class or Course	
Identification information	4 02 00.
Grade or year placement	4 03 00.
Position in sequence of classes or courses	4 03 52.
Level of difficulty	4 04 10.
Time schedule	4 06 00.
Credit or noncredit	4 08 20.
Pupils served	4 09 00.
Requirements for entrance	4 10 10.
Required or elective	4 10 20.
Requirements and recognition for successful completion	4 12 00.
Subject matter	4 21 00.
Planned instructional outcomes	4 23 00.
Structure of course	4 41 00.
Principal medium of instruction	4 42 00.
Principal methods of instruction	4 43 00.
Summary information about sections, pupils, and staff members	

Table 7.—Illustrative descriptions of self-contained classes and courses utilizing items of information from instructional program handbook

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Type of school organizational arrangement	Elementary school 2 02 42.10	Elementary school 2 02 42.10	Junior high school 2 02 42.31	Senior high school 2 02 42.34	Senior high school 2 02 42.34	Public junior college 2 02 42.41	Adult education 2 02 42.50
Type of program of studies	Typical elementary 3 02 43.11	Special education for handicapped 3 02 43.20	Typical junior high school 3 02 43.13	College preparatory 3 02 43.31	Occupational 3 02 43.42	Transfer 3 02 43.51	Free selection 3 02 43.61
Type of class organization	Self-contained class 4 02 45.10	Self-contained class 4 02 45.10	Course 4 02 45.20	Advanced placement course 4 02 45.22	Vocational course 4 02 45.21	Course 4 02 45.20	Course 4 02 45.20
Subject matter area	**Natural sciences** **13.00 00 00 00**	**Handicapped pupils** **19.00 00 00 00**	**Natural sciences** **13.00 00 00 00**	**Natural sciences** **13.00 00 00 00**	**Trade and industrial occupations** **17.00 00 00 00**	**Natural sciences** **13.00 00 00 00**	**Business** **03.00 00 00 00**
Principal segment of subject matter	**General science** **13.01 00 00 00**	**Language development** **19.01 02 00 00**	**General science** **13.01 00 00 00**	**Chemistry** **13.03 01 00 00**	**Automotive services** **17.03 00 00 00**	**Organic chemistry** **13.03 01 22 00**	**Accounting principles** **03.01 00 00 00**
Planned instructional outcome	General development in area 4 23 00.11	Skills in area 4 23 00.27	General development in area 4 23 00.11	Knowledge and understanding 4 23 00.13	Occupational competence 4 23 00.18	Knowledge and understanding 4 23 00.13	Understanding of basic principles 4 23 00.31
Grade or year placement	Grade 6 2 03 21.06	4th year 2 03 31.40	Grade 8 2 03 21.08	Grade 11 2 03 21.11	Grade 12 2 03 21.12	Grade 13 2 03 21.13	Ungraded 2 03 21.30
Level of difficulty or ability	Average difficulty 4 04 10.10	For mentally retarded 4 04 10.40	Average difficulty 4 04 10.10	Above average difficulty 4 04 10.20	Average difficulty 4 04 10.10	Average difficulty 4 04 10.10	Average difficulty 4 04 10.10
Pupils served by program of studies	Normal range 3 09 50.10	Educable mentally retarded 3 09 60.31	Normal range 3 09 50.10	Gifted in academic work 3 09 60.11	Normal range 3 09 50.10	Normal range 3 09 50.10	Adult age 3 09 50.95
Required or elective	Required for all pupils 4 10 20.10	Required for pupils in program 4 10 20.59	Required for all pupils 4 10 20.10	2 science units required for college preparatory 4 10 20.31	Required in area of specialization 4 10 20.60	Required for premedical program 4 10 20.59	Elective for all pupils 4 10 20.70
Instruction: Principal medium	Single teacher 4 42 11.10	Single teacher 4 42 11.10	Single teacher 4 42 11.10	Team of teachers 4 42 11.20	On-the-job supervision 4 42 12.10	Single teacher 4 42 11.10	Single teacher 4 42 11.10
Instruction: Principal methods	Demonstration 4 43 00.02 Directed observation 4 43 00.04 Discussion 4 43 00.05 Field trip 4 43 00.10	Discussion 4 43 00.05 Modeling and imitation 4 43 00.16 Practice 4 43 00.17	Demonstration 4 43 00.02 Directed observation 4 43 00.04 Discussion 4 43 00.05 Field trip 4 43 00.10 Practice 4 43 00.17	Demonstration 4 43 00.02 Discussion 4 43 00.05 Laboratory experience 4 43 00.12	Demonstration 4 43 00.02 Directed observation 4 43 00.04 Shopwork 4 43 00.24	Demonstration 4 43 00.02 Discussion 4 43 00.05 Laboratory experience 4 43 00.12 Lecture 4 43 00.13	Demonstration 4 43 00.02 Discussion 4 43 00.05 Practice 4 43 00.17
Instructional space	Regular classroom 4 35 20.11	Special space 4 35 20.26	Regular classroom 4 35 20.11	Laboratory room 4 35 20.22		Laboratory room 4 35 20.22	Regular classroom 4 35 20.11
Instructional equipment and supplies	Motion pictures 4 36 40.30	Audio equipment 4 36 30.90	Overhead projector 4 36 20.62	Laboratory equipment 4 36 60.80		Laboratory equipment 4 36 60.80	Business supplies 4 36 60.20
Position of course in sequence					4th course 4 03 52.04	1st course 4 03 52.01	1st course 4 03 52.01
Number of courses in sequence					4 courses 4 03 51.04	2 courses 4 03 51.02	2 courses 4 03 51.02
Time: minutes per week	150 minutes/week 4 08 13.03		200 minutes/week 4 08 13.04	300 minutes/week 4 08 13.06	900 minutes/week 4 08 13.09	350 minutes/week 4 08 13.06	270 minutes/week 4 08 13.05
Time: number of weeks	36 weeks 4 06 88.06	36 weeks 4 06 88.06	36 weeks 4 06 88.06	36 weeks 4 06 88.06	18 weeks 4 06 88.04	17 weeks 4 06 88.04	18 weeks 4 06 88.04
Accreditation of school (by regional association).		School approved 2 05 10.10		High school accredited 2 05 30.10	High school accredited 2 05 30.10	College accredited 2 05 30.10	
Approval of course (by State education agency).		Approved 4 05 10.10	Approved 4 05 10.10	Approved 4 05 10.10	Approved 4 05 10.10	Approved 4 05 10.10	

A few detailed items of information have been selected to illustrate in table 7 the manner in which specific self-contained classes and courses may be described for various levels of organization. A description of a different class or course is included in each vertical column. For example, the combination of items in the third column describes a general science course in the eighth grade of a junior high school. If desired, such a description may be extended considerably, using the items of this handbook. Descriptions of items in boldface letters are included in chapters 5 and 6 while descriptions of the other items may be located in chapters 3 and 4; the identification numbers may be used to locate the terminology and definitions or descriptions in these chapters.

Items Describing a Cocurricular Activity	*Item number*
Identification information	4 02 00.
Grade or year placement	4 03 00.
Level of ability required	4 04 20.
Time schedule	4 06 00.
Pupils served	4 09 00.
Requirements for entrance	4 10 10.
Requirements and recognition for successful completion	4 12 00.
Content of cocurricular activity	4 21 30.
Planned outcomes for pupils	4 23 00.
Principal methods of instruction or direction	4 43 00.
Summary information about pupils and staff members involved	
Items Describing a Section	
Specifications for section	5 01 00.
Section identification information	5 02 00.
Time schedule for section	5 06 00.
Pupils scheduled into section	5 09 00.
Teacher or other staff member assigned to section	5 31 00.
Location of instruction	5 34 00.
Instructional equipment and supplies	5 36 00.
Items Describing a Service Activity	
Specifications for service	5 01 00.
Service identification information	5 02 00.
Time schedule for service	5 06 00.
Persons receiving service	5 09 00.
Staff member assigned to service	5 31 00.
Location of service	5 34 00.
Equipment and supplies	5 36 00.

Table 8.—Illustrative portion of checklist indicating subject matter provided within a school system having elementary and secondary schools only

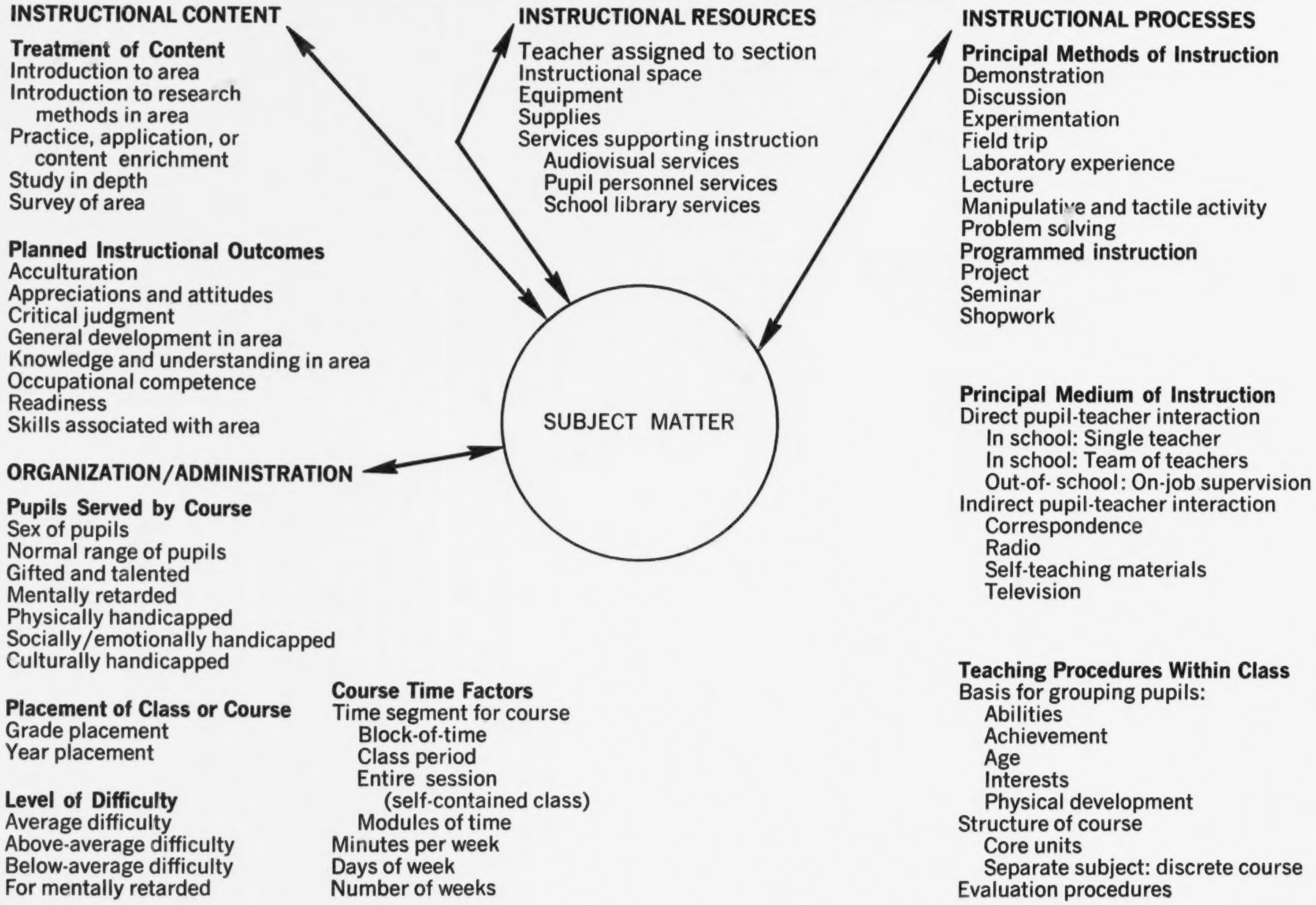
Social Sciences/Social Studies	Type of instructional program[1]			
	Elementary	Secondary	Junior college	Adult education
History	X	X		
American History (including Canada, Latin America, and United States)	X	X		
Local History	X	X		
Modern History		X		
State History	X	X		
United States History	X	X		
Western Civilization		X		
Nonwestern History		X		
World Civilization		X		
World History		X		
Other History (specify)		X		
Humanities	X			
Philosophy				
Ethics				
History of Philosophy				
Introduction to Philosophy				
Logic				
Metaphysics				
Philosophy of Religion				
Other Philosophy (specify)				
Political Science	X	X		
American Government	X	X		
Comparative Systems		X		
Contemporary World Affairs		X		
International Relations		X		
Political Parties and Public Opinion				
Political Socialization				
Political Theory				
Other Political Science (specify)				
Psychology				
Developmental Psychology				
Educational Psychology				
Etc				

---

[1] The insertion of an "X" following a subject-matter heading indicates that this aspect of subject matter is provided within the school system in the type of instructional program indicated.

24

Figure 2.—Interrelationships of subject matter with other selected aspects of curriculum and instruction



INSTRUCTIONAL CONTENT

Treatment of Content
Introduction to area
Introduction to research
  methods in area
Practice, application, or
  content enrichment
Study in depth
Survey of area

Planned Instructional Outcomes
Acculturation
Appreciations and attitudes
Critical judgment
General development in area
Knowledge and understanding in area
Occupational competence
Readiness
Skills associated with area

ORGANIZATION/ADMINISTRATION

Pupils Served by Course
Sex of pupils
Normal range of pupils
Gifted and talented
Mentally retarded
Physically handicapped
Socially/emotionally handicapped
Culturally handicapped

Placement of Class or Course
Grade placement
Year placement

Level of Difficulty
Average difficulty
Above-average difficulty
Below-average difficulty
For mentally retarded

Course Time Factors
Time segment for course
  Block-of-time
  Class period
  Entire session
    (self-contained class)
  Modules of time
Minutes per week
Days of week
Number of weeks

INSTRUCTIONAL RESOURCES

Teacher assigned to section
Instructional space
Equipment
Supplies
Services supporting instruction
  Audiovisual services
  Pupil personnel services
  School library services

INSTRUCTIONAL PROCESSES

Principal Methods of Instruction
Demonstration
Discussion
Experimentation
Field trip
Laboratory experience
Lecture
Manipulative and tactile activity
Problem solving
Programmed instruction
Project
Seminar
Shopwork

Principal Medium of Instruction
Direct pupil-teacher interaction
  In school: Single teacher
  In school: Team of teachers
  Out-of-school: On-job supervision
Indirect pupil-teacher interaction
  Correspondence
  Radio
  Self-teaching materials
  Television

Teaching Procedures Within Class
Basis for grouping pupils:
  Abilities
  Achievement
  Age
  Interests
  Physical development
Structure of course
  Core units
  Separate subject: discrete course
Evaluation procedures

Table 9.—Illustrative portion of checklist indicating subject matter provided within an elementary school, grades K–8

Social Sciences/Social Studies	Check "X" if provided	Or, indicate grade level
Anthropology	X	8
Archeology	X	8
Cultural Anthropology	X	8
Ethnography		
Ethnology		
Ethnoscience		
Physical Anthropology		
Other Anthropology (specify)		
Area Studies (multidisciplinary)	X	K–5, 7
Areas beyond the United States	X	5, 7
Africa	X	5
Asia	X	7
Australasia	X	7
Canada	X	5
Europe	X	5
Latin America	X	5
Middle East	X	7
Soviet	X	7
Other Areas Beyond the United States (specify)		
Regions of the United States	X	4
Midwest	X	4
North Central	X	4
Northeast	X	4
Northwest	X	4
Southeast	X	4
Southwest	X	4
Other Regions of the United States (specify)		
Small Areas	X	K–3
Home State	X	3, 4
Local community	X	1, 2
School community	X	K–2
Neighborhood	X	K, 1
Other Small Area (specify)		
Other area studies (specify)		
Citizenship Education	X	K–8
Conservation (Environmental Education)	X	4, 7

Figure 2 provides an illustration of the close relationship that exists between "Items of Information About the Organization, Administration, Content, Resources, and Processes of Instruction" (classified in chapter 3 and defined or described in chapter 4), and "Items of Information About Subject Matter and Cocurricular Activities" (Classified in chapter 5 and defined or described in chapter 6).

Contemporary World Affairs, classified (as item number 15.11 03 00 00) in chapter 5 and described in chapter 6 in the Political Science category of the Social Sciences/Social Studies subject-matter area, may serve as an example for relating items of information from chapters 3 and 4 to an item about subject matter. The narrative description of *Contemporary World Affairs*, the "Subject Matter" in figure 2, may be enhanced by relating to it selected items from chapters 3 and 4, the peripheral items in figure 2, such as:

Treatment of content: survey of area (item 42200.05).
Planned instructional outcome: appreciations and attitudes (item 42300.02).
Pupils served by course: normal range of pupils (item 30950.10).
Grade placement: grade 12 (item 20321.12).
Level of difficulty: average difficulty (item 40410.10).
Time segment in daily session: single class period (item 40686.13).
Principal methods of instruction: discussion, lecture and seminar (items 44300.05, 44300.13, and 44300.23).
Principal medium of instruction: direct pupil-teacher interaction—single teacher (item 44211.10).
Teaching procedures within class: basis for grouping pupils—interests; arrangement of course content—separate subject (items 44420.30 and 44110.10).

An overview of subject matter available throughout a school system may be indicated in the columns of the pages of chapter 5, as is illustrated in table 8 and described in the introduction to chapter 5 on page 107. This type of chart also may be used to describe instruction, provided by the school system central staff, which would be included under item 11310, Instruction on Systemwide Basis. An extension of this type of chart, as is illustrated in table 9, may be used to describe all the subject matter provided within a single school. Information on such charts for the various schools of a school system may provide the source of information used in completing the systemwide chart illustrated in table 8.

Relating Information About Curriculum and Instruction to Other Areas of Educational Information

For purposes of simplicity or convenience, information about education frequently is organized into broad recordkeeping areas referred to by terms such as financial accounting, property accounting, staff accounting, and pupil accounting. In a total information system, all such areas are interrelated, or will be ultimately. These interrelationships are illustrated in figure 3.

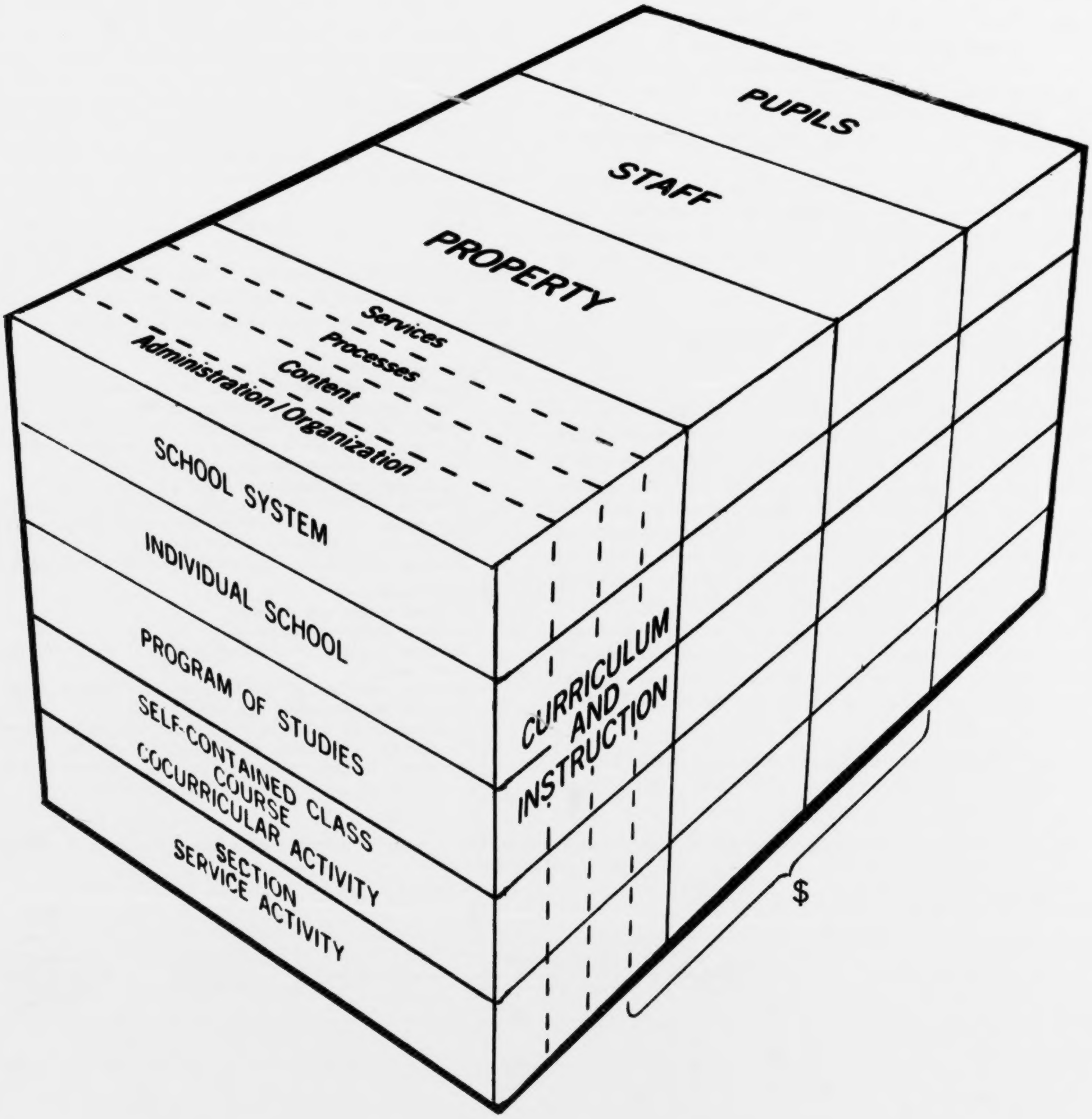

PUPILS
STAFF
PROPERTY
Services
Processes
Content
Administration/Organization
SCHOOL SYSTEM
INDIVIDUAL SCHOOL
PROGRAM OF STUDIES
SELF-CONTAINED CLASS
COURSE
COCURRICULAR ACTIVITY
SECTION
SERVICE ACTIVITY
CURRICULUM AND INSTRUCTION
$

Figure 3. — Some interrelationships among areas of information about education

The top surface of the model in figure 3 indicates large blocks of information about pupils, staff, property, and the instructional program (curriculum and instruction). The block for curriculum and instruction is subdivided in this model into instructoinal processes, services, content, and administration/organization. The horizontal slices of the model indicate how specific organizational units—such as given school systems, schools, courses, cocurricular activities, and sections—are described in terms of information about the instructional program, property, staff, and pupils. Information about pupils, staff, property, and the instructional program thus is interrelated in describing specific organizational units.

Characteristics of property (that is—land, buildings, equipment, and supplies), staff members, and services may be described in terms of their cost or value, as is suggested by the dollar sign bracketing these areas in figure 3.

Measures Involving Curriculum and Instruction

As referred to in this handbook, a measure related to curriculum and instruction is any *quantitative* information about a school, school system, or other reporting unit (e.g., a type of self-contained class or course, an intermediate administrative unit, or a State) which concerns curriculum and instruction and frequently is related to one or more items of information about pupils, staff, property, finances, and time. Such measures describe the quantity or extent of given elements affecting an instructional program and are used for making comparisons among similar administrative units. Measures involving curriculum and instruction may be compared when they—

- are based on standardized items of information;
- apply to comparable administrative units (e.g., similar schools, school districts, intermediate adminsitrative units, or States);
- involve comparable time elements; and
- are computed by comparable processes.

Table 10 illustrates the manner in which items and areas of information might be interrelated as "measures" to describe an aspect of the operation of a single school. If desired, similar comparisons may be made for information about a school system, program of studies, self-contained class, course, cocurricular activity, section, or service activity. Though many of the items included in such measures are not defined in this handbook, they sometimes are used in making judgments about the adequacy or appropriateness of aspects of the instructional program.

Among measures involving curriculum and instruction are the following, many of which are described in the glossary. These numerous measures may be scanned in selecting those which might be useful for given purposes in given situations.

General Curriculum Measures
- Number of schools offering a given course.
- Percentage of schools offering a given course.
- Number of schools offering a given program of studies.
- Percentage of schools offering a given program of studies.
- Number of schools providing a given service.
- Percentage of schools providing a given service.
- Number of school systems providing a given service.
- Percentage of school systems providing a given service.
- Number of sections for given courses.
- Number of sections for given self-contained classes.

Pupil Measures
- Average daily attendance.
- Average daily membership.
- Average number of children per local basic administrative unit.
- Average number of children per attendance area.
- Average membership per school.
- Percentage of total excess public school membership.
- Percentage of pupils in nonpublic schools.
- Number of pupils in system, school, program of studies, or course having given characteristics.

Table 10.—Some interrelationships among selected illustrative items of information pertaining to a 400-pupil elementary school

Category of information	Property				Staff
Quantity and unit	A facility category (e.g., 1 elementary school)	An equipment category (e.g., 10 slide projectors)	Total supplies	A supply category (e.g., 2,500 textbooks)	An assignment category (e.g., 15 classroom teachers)[1]
Expenditure:					
Total	$750,000	$800	$10,000	$9,000	$125,000
Per unit	750,000	80	----------	4	8,333
Per pupil	----------	2	25	23	313
Per classroom teacher[1]	50,000	53	667	600	8,333
Units per pupil	----------	----------	----------	6.3	----------
or					
Pupils per unit	400	40	----------	----------	26.7
Units per classroom teacher[1]	----------	----------	----------	167	----------
or					
Classroom teachers[1] per unit	15	1.5	----------	----------	----------

---

[1] Full-time equivalency of assignments.

Percentage of pupils in system, school, program of studies, or course having given characteristics.
Median age of pupils.
Percentage of exceptional children in special classes or schools.
Percentage of total membership being provided appropriate special education.
Number of pupils enrolled in a given course.
Precentage of pupils participating in various activities.
Percentage of a given pupil group (e.g., pupils in grade 11, or in an occupational program) enrolled in a given course.
Number of pupils enrolled in a given program of studies.
Percentage of pupils enrolled in a given program of studies.
Pupil membership in school system.
Pupil membership by school level.
Pupil membership in a given school.
Pupil membership by grade.
Percentage of attendance.
Number of pupils completing a grade.
Number of pupils completing high school.
Number of pupils graduating from high school, by type of program of studies.
Number of junior college graduates, by type of program of studies and by area of specialization.
Percentage of graduates in a given program of studies.
Percentage of graduates who had a given course.
Percentage of high school graduates who completed courses in given subject areas.
Percentage of pupils currently enrolled in courses in various subject areas.
Average class size, by grade of self-contained class.
Average class size, by subject matter area of course.
Number of pupils completing a grade.
Percentage of pupils making normal progress.
Percentage of pupils promoted.
Number of pupils advanced at an accelerated rate.
Number of pupils not promoted (or retained).
Percentage of pupils not promoted (or retained).

Pupil-Staff Measures
Pupil-teacher ratio.
Pupil-classroom teacher ratio.
Classroom teachers per 1,000 pupils in average daily membership.
Pupil-teacher ratio, by subject matter of course.
Teachers per 1,000 pupils in average daily membership
Teachers other than classroom teachers per 1,000 pupils in average daily membership.
Pupil-counselor ratio.
Pupil-school librarian ratio.
Pupil-nurse ratio.
Pupil-principal ratio.
Pupil-professional educational staff ratio.
Professional educational staff per 1,000 pupils in average daily membership.
Pupil-total staff ratio.

Staff Measures
Percentage of self-contained class sections taught by certified staff members.
Percentage of course sections taught by certified staff members (by subject matter).
Teacher-instructional supervisor ratio.
Percentage of schools having a certified librarian (by school level).
Percentage of classroom teachers having given characteristics.

Pupil-Property Measures
Pupils per acre.
Library books per pupil.
Pupil capacity of a school plant.
Excess membership in public schools.
Percentage of total excess public school membership.

Property Measures
Percentage of secondary schools having a language laboratory.
Percentage of course sections in foreign languages utilizing a language laboratory.
Percentage of physics (or chemistry) course sections utilizing a physics (or chemistry) laboratory.
Average number of self-contained classes per record player.
Percentage of schools having a library (by school level).
Number of schools having facilities for a given aspect of the instructional program.
Percentage of schools having facilities for a given aspect of the instructional program.
Number and percentage of schools having facilities which are inadequate for a given aspect of the instructional program.

Financial Measures
Current expenditures per pupil.
Current expenditures per pupil in ADA, by school level, by term.
Current expenditures per pupil in ADM, by school level, by term.
Current expenditures per pupil per day (ADA)
Current expenditures per pupil per day (ADM).
Current expenditures per pupil per hour course meets (adult education).

Evaluation of Quality

The need arises at times for schools, school systems, accreditation associations, and other agencies to undertake an evaluation of the quality of the instructional program of a given school or school system. There are at least three types of evaluation, including (1) satisfying minimum or basic legal requirements, sometimes referred to as "approval," (2) determining the extent to which set standards of quality surpassing minimum legal requirements are met, sometimes referred to as "accreditation," and (3) determining the extent to which specified local needs and objectives are being met or have been met. In all three types the basis for evaluation or assessment is comprised of predetermined requirements, standards, or objectives to which actual performance is compared.[1]

The items presented in chapters 3 and 4 are quantitative in nature. They may be used to indicate whether or not given conditions exist within a school or school system; when totaled (as for pupils of a school or schools of a school system) they are an indication of the *extent* to which given conditions exist.

To make a judgment of quality, an evaluator must first ascertain whether or not a condition or practice exists and the extent to which it exists (the quantitative element mentioned above), and then apply a subjective value judgment as to the appropriateness, adequacy, and effectiveness of the condition or practice. This may be done by rating each condition or practice as "satisfactory" or "unsatisfactory"; "superior," "average," or "poor" (or "needs improvement"); or on a numerical continuum (for example, "0, 1, 2, 3, 4, 5") in which each rating is combined with other ratings of related conditions, perhaps with weightings for some ratings, for a total score.

The purposes of this handbook are limited to providing the means for identifying or describing selected practices and conditions, singly and in combination; any desired or required value judgments must be provided from some other source.

---

[1] See also the introductions to the X0700 Series on p. 71 and to the X0500 Series on p. 65.

For purposes of evaluation of quality, the types of quantitative information included above as "measures" frequently are used in conjunction with the following types of information (many of which encompass items of chapter 4) in the statement of requirements, standards, or objectives as well as in the determination of the extent to which any such requirements, standards, or objectives have been satisfied or met:

- Location of school system (including region of the country and size, e.g., rural, village, town, or large city)
- Characteristics of community (including occupational structure of community; educational level of parents; cooperation of schools with community agencies; community attitude toward schools; local problems, e.g., juvenile delinquency, civil rights, and unemployment; and community planning for improvement of housing, recreation, and health needs) (See item X0710.30 and the X3300 Series of chapter 4.)
- Community resources (including the facilities, agencies, business, and persons outside the schools in the community that may be, or are, used by the schools for their educative values) (See the X3300 Series.)
- Characteristics of school system (e.g., size, organization, and effectiveness of administration) (See the 10000 Series of chapter 3.)
- Characteristics and needs of pupils (including the composition of pupil groups as indicated by numbers and proportions of pupils according to sex; age; race; range and median of mental ability; other psychological factors; physical factors; school placement; enrollments for a full or less than full course load; regularity of attendance; educational and career intentions; range of school performance; standardized test results; performance on nationwide scholarship examinations; scholarship awards; awards made on a regional basis; nonschool performance; postschool performance; and mobility or stability) (See item X0710.50 and the X0900 Series of chapter 4.)
- The curriculum itself (including, for illustration, adequacy of scope and sequence, comprehensiveness or variety of offerings, remedial work, introductory or survey courses, work-study courses, evening courses for dropouts, courses for postgraduates, depth of study in given subject matter as illustrated by advanced placement courses, cocurricular activities, indications of meaningful innovation and experimentation, nature of objectives for which provision is made, use of appropriate teaching processes such as team teaching and independent study, adequacy and effectiveness of services supporting instruction, and articulation between successive schools and with out-of-school agencies)
- Characteristics of the instructional staff (e.g., number, preparation, experience, certification status, morale, assignments, and teaching load or pupil load) (See item X0752.10.)
- Services supporting instruction (including their nature, appropriateness, accessibility, adequacy, frequency of use, and effectiveness of management) (See item X0752.20 and the X3200 Series.)
- Facilities, including built-in equipment (considering, for example, quantities, adequacy, accessibility, and frequency of use) (See the X3500 Series.)
- Movable equipment, including library books (considering, for example, their appropriateness, quantities, adequacy, accessibility, and frequency of use, and including the number of books in the library and the number added to the library during the preceding year) (See the X36000 Series.)
- Supplies, including textbooks and films (considering, for example, their appropriateness, quantities, adequacy, and frequency of use, and including the number of periodical and newspaper subscriptions) (See the X3600 Series).
- Finances (including the sources of funds, extent of financial resources, assessed valuation per pupil, amount and proportion of budget appropriations for the instructional program as a whole and for various aspects of the instructional program, and the actual expenditures for the various budget items) (See Handbook II.)[2]
- Salaries and salary schedule (including the appropriateness and adequacy of the salary schedule for classroom teachers and for other categories of the instructional staff, and the distribution of classroom teachers according to selected salary categories)
- Evaluation and curriculum improvement activities (See the X0700 Series.)

Use of Information About Curriculum and Instruction in Research and Experimentation

The widespread implementation of the items of information in this handbook will result in the availability of vast quantities of comparable information which might be utilized for research purposes. Information most valuable for *all* purposes becomes available when comparable information is used within the schools and is forwarded, as required, to other agencies such as local school systems, State education agencies, other State agencies and associations, the United States Office of Education, other Federal agencies, and national associations.

Although in the development of this handbook use of the classification system for research was not a primary concern, it may be noted that when quantities of comparable information are available in computer or other storage facilities, they may be tapped with comparative ease for making meaningful totals and for comparing different variables. The use of agreed-on handbook items in local school systems will aid in eliminating duplication of requests for information from different sources and save time in obtaining the needed information. These common items may serve as guides to researchers, providing some indication as to what items of information might be available and in what form. Use of these items will provide greater opportunity for meaningful research for various types of governmental agencies at all levels, nongovernmental organizations of various scopes of operation, organizations of school systems, foundations operating in the field of education, accrediting associations, and college and university personnel.

---

[2] Paul L. Reason and Alpheus L. White, *Financial Accounting for Local and State School Systems: Standard Receipt and Expenditure Accounts.* Washington: U.S. Government Printing Office, 1957. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook II, Bulletin 1957, No. 4.

As an illustration of the possible use of these comparable items in experimentation, personnel of the local school system might test hypotheses about factors of significance in the learning process by identifying for given pupil groups, educational "input" items which vary (e.g., teacher qualifications, teacher personality, teaching methods, organization of classes, length and frequency of classes, variations in instructional content, and use of various instructional resources) to learn which of these factors have significant effect upon the educational "output" (as indicated by the performance of pupils in school, outside of school, and after leaving the school). Certain of these input items might be identified in this way as being "crucial," or as factors which significantly influence the quality of education. Needless to say, this illustration goes somewhat beyond current practice and well beyond the scope of the specifics or intent of this handbook.

★ ★ ★ ★ ★

An orientation to this handbook and uses to which its items of information may be put has been included in chapters 1 and 2. The next chapter includes a classification of items of information which may be used to describe aspects of the organization, administration, content, resources, and process of curriculum and instruction. These items are defined in chapter 4. Subject-matter areas are included in chapters 5 and 6.

3

Classification of Items of Information About Curriculum and Instruction

Items of information describing significant aspects of the organization, administration, content, resources, and processes of curriculum and instruction are classified in this chapter according to levels of organization and selected categories of information. They are identified by a numbering system which reflects these categories and are appropriate for all types of schools and school systems. Definitions of these items are found in chapter 4 on the pages indicated in this chapter under the column heading *Definition Page Number*. Items used to describe the subject matter of instructional programs are presented in chapters 5 and 6.

An Item of Information About Curriculum and Instruction: Definition

An item of information, as defined for use in this handbook, is a descriptive heading under which is recorded information about curriculum and instruction. This heading may be (a) a broad categorical heading with a structured set of subheadings; (b) a broad categorical heading without a structured set of subheadings, under which a specified type of information is recorded; or (c) a heading of limited scope under which specific information is recorded. These headings, and the entries under them, form the basis for records and reports about curriculum and instruction.

Little attempt is made to distinguish between those categories of information from which a *single* multiple-choice item should be selected for report purposes and those catgeories from which two *or more* items may be chosen; such a distinction should be included, however, on any form used for the collection of these items.

The items of this chapter reflect five levels of organization—(1) the school system as a whole; (2) an individual school; (3) a program of studies; (4) a general self-contained class, course, or cocurricular activity; and (5) a specific section or an instructional service activity. Information about the smaller units of organization may be combined with other similar information to describe, in summary, aspects of larger units, e.g., information about a specific section of "Freshman English" may be combined with information about other similar sections in the school or throughout the school system. Items presented for smaller units of organization may be used to describe activities provided directly by the school system rather than by a school (e.g., a systemwide orchestra, or a special class in science meeting once a week for gifted fifth-graders).

The items are not intended to describe school board policy, but are intended to provide a means to reflect instructional practices at all levels within the local school system. These items may be used to indicate what is being done in the various classrooms and schools and may reflect, in this way, the *implementation* of policy.

Recommended and Optional Items

Information about instructional programs is essential for individual schools and school systems throughout the United States and its outlying areas. Those items of information which are basic and are therefore *recommended as needed for operating most schools and local school systems* are identified in this chapter by the designation "Rec."[1] Those items of information which are important and may be *collected and maintained at the option of individual schools and school systems* are identified by the designation "Op."[1] Additional items may be collected and maintained by individual schools and school systems at their own option as needed for their own purposes. Where a school system has a need to expand its system of information about curriculum and instruction, the expansion should be done in such a way that any additional items of information are readily classifiable under the headings presented in this handbook.

---

[1] Assigned on the basis of consensus among representatives of groups participating in the development of this handbook (see p. vii), the designations "Rec" and "Op" identify items of information (not practices) considered most important for the sound operation of schools, and probably reflect to an extent the frequency of use of these items.

The use of the designations "Rec" and "Op" is not intended to prescribe practice; it is intended to provide guidance to persons and groups establishing or reviewing their systems of information about curriculum and instruction.

Information According to Type of Instructional Program

Designations for the columns on the right-hand side of pages, beginning on page 29, are used to indicate the types of instructional programs to which specific items apply (i.e., elementary school instructional program, secondary school instructional program, instructional program for college credit, and adult education instructional program). The items of information on pages 21 to 29 refer to the *entire school system* and therefore are not identified with any such type of program.

Identification Numbers

The numbers appearing at the left of the items of information included in this chapter are for identification purposes, for locating items within the classification structure of the chapter.

The items are organized primarily on the basis of level of organization, the first digit of the number representing the level.[2] The second and third digits represent the major category of information, and provide the basis for the organization of items in chapter 4.[3] The digits following represent subdivisions of these categories.

Those numbers *without integers* to the right of the decimal point serve to identify general categories of information. Many of these categories contain subdivisions which are quite specific.

Those identification numbers *with integers* to the right of the decimal point serve to identify items of information which are limited in scope and specific. Each item of this type appears with one or more related items under a categorical heading. Such items may be used *either in combination or as alternatives*, according to the information needs of the school or school system.

The numbering of broad categories and specific items can provide the foundation for a coding system. Those items having identification numbers with digits to the right of the decimal point are multiple-choice items and may be used with appropriate adaptations as a code in the processing, storage, retrieval, and transmission of items of information about curriculum and instruction. Such a code may be used by local and State school systems for both manual and automated methods of data processing.

---

[2] 1 = school system; 2 = school; 3 = program of studies; 4 = self-contained class, course or cocurricular activity; 5 = section, or instructional service activity.

[3] These major categories are outlined on p. 4 and p. 10.

ITEMS DESCRIBING A SCHOOL SYSTEM 10000 Series

A school system comprises all the schools and supporting services controlled by a board of education or by any other organization which operates one or more schools. Items of information included in the 10000 Series may be used to describe those aspects of curriculum and instruction of a school system that (a) are centrally administered and are systemwide in scope, (b) involve all schools of the system having a given type of instructional program, or (c) involve a portion of the school system which is larger than one school but less than all schools having a given type of instructional program.

In those instances in which a program of studies, course, or cocurricular activity is organized centrally for qualified pupils of more than one school of the school system, items of information may be drawn as appropriate from the 20000, 30000, 40000, and 50000 Series—or from chapter 6—and included in the 11310 Series.

A school system comprised of a single school is identified under item 10260.50; items of information which can be used to describe practices within such a school are included in the 20000 Series.

Classification of items of information		Definition page No.	Recommended or optional
1 02 00.	IDENTIFICATION OF SCHOOL SYSTEM	59	
1 02 11.	School system name	59	Rec
1 02 21.	Standard school system number or code	59	Rec
1 02 31.	School system location	59	Op
1 02 41.	Type of school system	59	
1 02 41.10	State department of education	59	Rec
1 02 41.20	Other State education agency	59	Rec
1 02 41.30	Intermediate administrative unit	59	Rec
1 02 41.40	Local public school system	60	Rec

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 02 41.41	Does not operate any school	60	Rec
1 02 41.42	Operates area school for vocational or technical education only	60	Rec
1 02 41.43	Operates area school for special education only	60	Rec
1 02 41.44	Operates a single one-teacher school	60	Rec
1 02 41.51	Operates elementary school(s)	60	Rec
1 02 41.52	Operates middle school(s)	60	Rec
1 02 41.53	Operates secondary school(s)	60	Rec
1 02 41.54	Operates junior college	60	Rec
1 02 41.55	Provides adult education	60	Rec
1 02 41.59	Operates other type of school	60	Rec
1 02 41.60	Segment of local public school system	60	Rec
1 02 41.70	Nonpublic school system	60	Rec
1 02 41.90	Other unit	60	Rec
1 02 50.	Control of school system	62	
1 02 51.	Public control	62	
1 02 51.10	Local education agency	62	Rec
1 02 51.20	City or municipal government	62	Rec
1 02 51.30	Township government	62	Rec
1 02 51.40	County government	62	Rec
1 02 51.50	Other local public agency	62	Rec
1 02 51.60	State government	62	Rec
1 02 51.70	Federal government	62	Rec
1 02 51.80	Combination	62	Rec
1 02 51.90	Other public agency	63	Rec
1 02 52.	Nonpublic control	63	
1 02 52.10	Independent of church, nonprofit	63	Rec
1 02 52.20	Religious group	63	Rec
1 02 52.30	Proprietary	63	Rec
1 02 53.	Combined public and nonpublic control	63	Rec
1 02 54.	Control by an institution	63	
1 02 54.10	College or university	63	Rec
1 02 54.90	Other institution	63	Rec
1 02 59.	Other control	63	Rec
1 02 60.	Scope of central administration	63	
1 02 60.10	Central administration for entire system	63	Rec
1 02 60.20	Administration for geographic areas	63	Rec
1 02 60.30	Central administration for given level or type of school	63	Rec
1 02 60.40	Autonomous schools	63	Rec
1 02 60.50	Single school	63	Rec
1 02 60.90	Other administrative arrangement	63	Rec
1 03 00.	SPAN OF AGES AND GRADES IN SCHOOL SYSTEM	63	
1 03 11.	Span of compulsory attendance ages	64	
1 03 11.05	5 years old	64	Rec
1 03 11.06	6 years old	64	Rec
1 03 11.07	7 years old	64	Rec
1 03 11.08	8 years old	64	Rec
1 03 11.09	9 years old	64	Rec
1 03 11.10	10 years old	64	Rec
1 03 11.11	11 years old	64	Rec
1 03 11.12	12 years old	64	Rec
1 03 11.13	13 years old	64	Rec
1 03 11.14	14 years old	64	Rec
1 03 11.15	15 years old	64	Rec
1 03 11.16	16 years old	64	Rec
1 03 11.17	17 years old	64	Rec
1 03 11.18	18 years old	64	Rec
1 03 11.19	19 years old	64	Rec
1 03 11.20	20 years old	64	Rec
1 03 11.21	21 years old	64	Rec
1 03 11.30	Over 21 years old	64	Rec
1 03 11.40	No compulsory education requirement	64	Rec
1 03 11.50	No permissive attendance provision	64	Rec
1 03 11.99	No age limit	64	Rec

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 03 12.	Span of permissive attendance ages	64	Rec
1 03 21.	Lowest and highest grades in school system	64	Rec
1 05 00.	APPROVAL OF SCHOOL SYSTEM	65	
1 05 10.	Approval status	66	
1 05 10.10	Approved	66	Rec
1 05 10.20	Warning or probation	66	Rec
1 05 10.30	Approval denied	66	Rec
1 05 10.40	Application in process	66	Rec
1 05 10.50	Approval not requested	66	Rec
1 05 10.60	Approval not available	66	Rec
1 05 20.	Approving agency	66	
1 05 20.10	State department of education	66	Rec
1 05 20.20	Other State agency	66	Rec
1 05 20.90	Other agency	66	Rec
1 06 00.	SCHOOL SYSTEM TIME SCHEDULE	66	
1 06 10.	School year	66	
1 06 11.	Division of school year	66	
1 06 11.10	Regular school term and summer school term	66	Rec
1 06 11.20	Regular school term only	66	Rec
1 06 11.30	Three trimesters	66	Rec
1 06 11.40	Four quarters	66	Rec
1 06 11.80	Combination	66	Rec
1 06 11.90	Other division	67	Rec
1 06 20.	Regular school term	67	
1 06 21.	Division of regular school term	67	Op
1 06 22.	Calendar months in regular school term	67	
1 06 22.01	1 month or less	67	Op
1 06 22.02	2 months	67	Op
1 06 22.03	3 months	67	Op
1 06 22.04	4 to 6 months	67	Op
1 06 22.05	7 months	67	Op
1 06 22.06	8 months	67	Op
1 06 22.07	9 months	67	Op
1 06 22.08	10 months	67	Op
1 06 22.09	11 or 12 months	67	Op
1 06 23.	Equivalent weeks in regular school term	67	Op
1 06 23.09	Less than 30 weeks	67	Op
1 06 23.30	30 weeks	67	Op
1 06 23.31	31 weeks	67	Op
1 06 23.32	32 weeks	67	Op
1 06 23.33	33 weeks	67	Op
1 06 23.34	34 weeks	67	Op
1 06 23.35	35 weeks	67	Op
1 06 23.36	36 weeks	67	Op
1 06 23.37	37 weeks	67	Op
1 06 23.38	38 weeks	67	Op
1 06 23.39	39 weeks	67	Op
1 06 23.40	40 weeks	67	Op
1 06 23.41	41 weeks	67	Op
1 06 23.42	42 weeks	67	Op
1 06 23.43	43 weeks	67	Op
1 06 23.44	44 weeks	67	Op
1 06 23.89	More than 44 weeks	67	Op
1 06 24.	Days in session in regular school term	67	
1 06 24.01	Less than 160 days	67	Rec
1 06 24.02	160–169 days	67	Rec

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 06 24.03	170–174 days	67	Rec
1 06 24.04	175–179 days	67	Rec
1 06 24.05	180–184 days	67	Rec
1 06 24.06	185–189 days	67	Rec
1 06 24.07	190–199 days	67	Rec
1 06 24.08	200–209 days	67	Rec
1 06 24.09	More than 209 days	67	Rec
1 06 30.	Summer school term	67	
1 06 32.	Calendar months in summer school term	67	Op
1 06 33.	Calendar weeks in summer school term	67	Op
1 06 33.02	Less than 3 weeks	67	Op
1 06 33.03	3 weeks	67	Op
1 06 33.04	4 weeks	67	Op
1 06 33.05	5 weeks	67	Op
1 06 33.06	6 weeks	67	Op
1 06 33.07	7 weeks	67	Op
1 06 33.08	8 weeks	67	Op
1 06 33.09	9 weeks	67	Op
1 06 33.01	More than 9 weeks	67	Op
1 06 34.	Days in session in summer school term	67	
1 06 34.01	Less than 11 days	67	Rec
1 06 34.02	11–20 days	67	Rec
1 06 34.03	21–25 days	67	Rec
1 06 34.04	26–30 days	67	Rec
1 06 34.05	31–35 days	67	Rec
1 06 34.06	36–40 days	67	Rec
1 06 34.07	41–50 days	67	Rec
1 06 34.08	51–60 days	67	Rec
1 06 34.09	More than 60 days	67	Rec
1 06 90.	Other time elements	71	Op
1 07 00.	EVALUATION AND CURRICULUM IMPROVEMENT	71	
1 07 10.	Background of the instructional program	71	
1 07 10.11	Philosophy of the school system	71	Rec
1 07 10.13	Aims of the school system	71	Rec
1 07 10.21	School system policies	71	Rec
1 07 10.30	Characteristics of the community	71	Rec
1 07 10.40	School system-community relations	72	Rec
1 07 10.50	Characteristics and needs of pupils	72	Rec
1 07 10.51	Scholastic aptitude	72	Op
1 07 10.52	Exceptionality	72	Op
1 07 10.53	School placement	72	Op
1 07 10.54	Educational and career intentions	72	Op
1 07 10.55	School performance	72	Op
1 07 10.56	Nonschool performance	72	Op
1 07 10.57	Postschool performance	72	Op
1 07 10.58	Mobility/stability	72	Op
1 07 10.59	Pupil needs	72	Op
1 07 10.69	Other characteristics and needs	73	Op
1 07 10.70	Provisions for curriculum improvement	73	Rec
1 07 10.80	Provisions for improving teaching	73	Rec
1 07 10.90	Other background considerations	73	Op
1 07 20.	Organization for evaluation and/or curriculum improvement	73	Op
1 07 20.10	Administrative activity	73	Op
1 07 20.20	Advisory committee	73	Op
1 07 20.30	Steering committee	73	Op
1 07 20.40	Production committee	73	Op
1 07 20.50	Workshop	73	Op
1 07 20.90	Other organization	73	Op

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 07 30.	Persons or groups involved in evaluation and/or curriculum improvement	73	Op
1 07 30.10	Board of education	73	Op
1 07 30.20	Central administrative staff	73	Op
1 07 30.31	Central instructional staff	73	Op
1 07 30.32	School instructional staff	73	Op
1 07 30.41	Intermediate administrative unit	73	Op
1 07 30.42	State education agency	74	Op
1 07 30.43	Regional accrediting association	74	Op
1 07 30.44	Educators' organization	74	Op
1 07 30.50	Consultants	74	Op
1 07 30.60	Parents and/or guardians	74	Op
1 07 30.70	Representatives of community	74	Op
1 07 30.80	Pupils	74	Op
1 07 30.90	Other persons or groups	74	Op
1 07 40.	Evaluation procedures	74	
1 07 41.	Frequency of evaluation	74	Op
1 07 42.	Data collection media	74	Op
1 07 42.10	Observation	74	Op
1 07 42.20	Interview	74	Op
1 07 42.30	Standardized test	74	Op
1 07 42.40	Teacher-made objective test	74	Op
1 07 42.50	Survey instrument	74	Op
1 07 42.60	Cooperatively developed criteria	74	Op
1 07 42.70	Approval and/or accreditation criteria	74	Op
1 07 42.90	Other data collection media	74	Op
1 07 43.	Use of data collection findings	74	Op
1 07 44.	Interpretation of outcomes	74	Op
1 07 50.	Aspects of the instructional program evaluated	74	
1 07 51.	Instructional content	74	
1 07 51.10	Scope of instructional content	75	Rec
1 07 51.20	Subject-matter areas and courses	75	Op
1 07 51.30	Cocurricular activities	75	Op
1 07 51.40	Articulation of elements of instructional program	75	Op
1 07 51.41	Articulation between successive schools	75	Op
1 07 51.42	Articulation between successive years or grades	75	Op
1 07 51.43	Articulation among curriculum areas	75	Op
1 07 51.44	Articulation with nonschool educational institutions	75	Op
1 07 51.90	Other aspects of instructional content	75	Op
1 07 52.	Instructional resources	75	
1 07 52.10	Instructional staff	75	Rec
1 07 52.11	Preparation	75	Op
1 07 52.12	Experience	75	Op
1 07 52.13	Certification status	75	Op
1 07 52.14	Minimum qualifications for employment	75	Op
1 07 52.15	Nature of assignments	75	Op
1 07 52.16	Numerical adequacy of staffing	75	Op
1 07 52.17	Performance in assignment	75	Op
1 07 52.18	Staff morale	75	Op
1 07 52.19	Other characteristics of staff	75	Op
1 07 52.20	Services supporting instruction	75	Rec
1 07 52.21	Resource services for pupils	75	Op
1 07 52.22	Pupil personnel services	75	Op
1 07 52.23	Services for instructional staff	76	Op
1 07 52.29	Other services	76	Op
1 07 52.30	Administration	76	Op
1 07 52.31	Numerical adequacy of administrative staff	76	Op
1 07 52.32	Scheduling of staff	76	Op

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 07 52.33	Organization for administration	76	Op
1 07 52.39	Other administrative factors	76	Op
1 07 52.40	Facilities	76	Op
1 07 52.50	Movable equipment	76	Op
1 07 52.60	Supplies	76	Op
1 07 52.61	Provisions for textbooks for pupils	76	Op
1 07 52.71	Finances	76	Op
1 07 52.72	Salaries and salary schedule	76	Op
1 07 52.80	Community resources	76	Op
1 07 52.90	Other instructional resources	76	Op
1 07 53.	Instructional processes	76	Op
1 07 53.10	Medium of instruction	76	Op
1 07 53.20	Methods of instruction	76	Op
1 07 53.90	Other aspects of instructional processes	77	Op
1 07 55.	Factors evaluated in instructional services	77	Op
1 07 55.10	Characteristics of staff	77	Op
1 07 55.20	Nature of services provided	77	Op
1 07 55.30	Resource utilization	77	Op
1 07 55.90	Other factors		Op
1 07 60.	Curriculum improvement activity	77	Op
1 07 60.10	Planning for curriculum improvement	77	Op
1 07 60.20	Development of guide in subject-matter areas	77	Op
1 07 60.30	Development of other reproduced materials	77	Op
1 07 60.40	Inservice education and supervision	77	Op
1 07 60.90	Other activity	77	Op
1 07 70.	Scope of curriculum improvement activity	77	Op
1 07 71.	Span of levels, grades, and years	77	Op
1 07 71.10	All levels, grades, and years	77	Op
1 07 71.20	Single school level	77	Op
1 07 71.30	Major segment of school level	77	Op
1 07 71.40	Single grade or year, one regular school term	77	Op
1 07 71.50	Single grade or year, other single term	77	Op
1 07 71.60	Segment of term	77	Op
1 07 71.70	Level or years preceding those of school system	78	Op
1 07 71.80	Level or years following those of school system	78	Op
1 07 72.	Scope of content	78	Op
1 07 72.10	All subject-matter areas	78	Op
1 07 72.20	One or a few subject-matter areas	78	Op
1 07 72.30	Content which is not subject-matter oriented	78	Op
1 07 79.	Other aspect of scope	78	Op
1 07 80.	Content of reproduced materials	78	Op
1 07 80.01	Statement of philosophy	78	Op
1 07 80.02	Statement of policy	78	Op
1 07 80.03	Statement of need	78	Op
1 07 80.04	Statement of aims and objectives	78	Op
1 07 80.05	Outline of subject matter	78	Op
1 07 80.06	Outline or list of learning experiences	78	Op
1 07 80.07	Outline or list of teaching procedures	78	Op
1 07 80.08	List of resources for instructors	78	Op
1 07 80.09	List of resources for pupils	78	Op
1 07 80.10	Evaluation procedures	78	Op
1 07 80.99	Other content	78	Op
1 07 90.	Other aspects of evaluation and curriculum improvement	78	Op

Classification of items of information		Definition page No.	Recommended or optional
1	SCHOOL SYSTEM—Continued		
1 13 10.	INSTRUCTION ON SYSTEMWIDE BASIS	86	Rec
1 32 00.	SCHOOL SYSTEM SERVICES SUPPORTING INSTRUCTION	90	
1 32 10.	Resource services for pupils	90	Rec
1 32 11.	School library services	90	Op
1 32 12.	Audiovisual services	91	Op
1 32 13.	Provisions for textbooks	91	Op
1 32 14.	Provisions for supplies	91	Op
1 32 19.	Other resource services for pupils	91	Op
1 32 20.	Pupil personnel services	91	Rec
1 32 21.	Guidance services	91	Rec
1 32 21.10	Counseling with pupils	91	Rec
1 32 21.20	Counseling with parents	91	Op
1 32 21.30	Consultant service to staff members	91	Op
1 32 21.40	Pupil appraisal services	92	Op
1 32 21.50	Information services	92	Op
1 32 21.70	Placement services	92	Op
1 32 21.82	Financial aid services	92	Op
1 32 21.91	Referral for additional guidance services	92	Op
1 32 21.99	Other guidance services	92	Op
1 32 22.	Health services	92	Rec
1 32 22.10	Health appraisal	92	Op
1 32 22.21	Nurse services	92	Op
1 32 22.22	Provision of care of emergency illness and injury	92	Op
1 32 22.30	Inservice education on health services	92	Op
1 32 22.40	Health counseling for individual pupils	92	Op
1 32 22.50	Communications to parents about health problems of pupils	92	Op
1 32 22.60	Dental services	92	Op
1 32 22.70	Psychiatric services	92	Op
1 32 22.81	Immunization program	92	Op
1 32 22.82	Prevention and control of communicable diseases	92	Op
1 32 22.84	Promoting a healthful school environment	92	Op
1 32 22.86	Referral for diagnosis or treatment	92	Op
1 32 22.90	Other health services	93	Op
1 32 23.	School psychological services	93	Op
1 32 24.	Speech pathology and audiology services	93	Rec
1 32 24.10	Speech pathology services	93	Op
1 32 24.20	Audiology services	93	Op
1 32 25.	School attendance and social work services	93	Rec
1 32 25.10	Attendance services	93	Op
1 32 25.20	School social work services	93	Op
1 32 29.	Other pupil personnel services	93	Op
1 32 30.	Services for instructional staff	93	Rec
1 32 31.	School library services	93	Op
1 32 32.	Audiovisual services	94	Op
1 32 33.	Curriculum laboratory	94	Op
1 32 34.	Other resource services	94	Op
1 32 35.	Instructional supervision services	94	Op
1 32 35.10	Assistance with planning	94	Op
1 32 35.20	Assistance in understanding pupils	94	Op
1 32 35.30	Assistance with development of skills and/or techniques of instruction	94	Op
1 32 35.40	Assistance with evaluation	94	Op
1 32 35.50	Assistance with research activity	94	Op
1 32 35.60	Direction of inservice education activities	94	Op
1 32 35.90	Other supervision services	94	Op
1 32 36.	Provisions for inservice education	94	Op

Classification of items of information		Definition page No.	Recommended or optional
SCHOOL SYSTEM—Continued			
1 32 36.01	Workshop	94	Op
1 32 36.02	Institute	94	Op
1 32 36.03	Conference	94	Op
1 32 36.04	Lecture	94	Op
1 32 36.05	Demonstration	94	Op
1 32 36.06	Staff meetings	94	Op
1 32 36.07	Committee project	94	Op
1 32 36.08	Group study activity	94	Op
1 32 36.09	Helping-teacher services	95	Op
1 32 36.10	Television program for inservice education	95	Op
1 32 36.11	School visit	95	Op
1 32 36.12	Payment of expenses to professional meetings	95	Op
1 32 36.13	College course	95	Op
1 32 36.14	Payment of tuition	95	Op
1 32 36.15	Sabbatical leave	95	Op
1 32 36.16	Leave without pay	95	Op
1 32 36.90	Other provisions for inservice education	95	Op
1 32 39.	Other services for instructional staff	95	Op
1 32 40.	Research and statistical services	95	Op
1 32 40.10	Research services	95	Op
1 32 40.11	Applied research	95	Op
1 32 40.12	Basic research	95	Op
1 32 40.20	Evaluation services	95	Op
1 32 40.30	Statistical services	95	Op
1 32 40.40	Coordination of information about individual schools	95	Op
1 32 40.90	Other research and statistical services	95	Op
1 32 50.	Data processing services	95	Op
1 32 50.01	Attendance accounting	96	Op
1 32 50.02	Class scheduling	96	Op
1 32 50.03	Preparing class lists	96	Op
1 32 50.04	Preparing report cards	96	Op
1 32 50.05	Test scoring and reporting	96	Op
1 32 50.09	Other data processing services	96	Op
1 32 60.	Information services	96	Op
1 32 70.	Community services	96	Rec
1 32 70.02	Civic activities	96	Op
1 32 70.03	Community recreation programs	96	Op
1 32 70.04	Community welfare activities	96	Op
1 32 70.07	Identification of community needs and interests	96	Op
1 32 70.08	Library service to public	96	Op
1 32 70.09	Programs of education in custodial and detention care	96	Op
1 32 70.10	Services for nonpublic school pupils	96	Op
1 32 70.20	Coordination with community agencies	96	Op
1 32 70.21	The courts of law	96	Op
1 32 70.22	Employment agencies	96	Op
1 32 70.23	Health and welfare agencies	96	Op
1 32 70.24	Recreation agencies	96	Op
1 32 70.29	Other agencies	96	Op
1 32 70.90	Other community services	96	Op
1 32 81.	Food services	96	Op
1 32 82.	Pupil transportation services	96	Op
1 32 82.10	Transportation between home and school	96	Op
1 32 82.20	Field trips related to school activities	96	Op
1 32 82.90	Other pupil transportation services	96	Op
1 32 90.	Other services supporting instruction	96	Op
1 33 00.	COMMUNITY RESOURCES	96	Op

Classification of items of information		Definition page No.	Recommended or optional
SCHOOL SYSTEM—Continued			
1 51 10.	SCHOOLS IN SCHOOL SYSTEM (SUMMARY INFORMATION)	103	Rec
1 52 10.	FACILITIES WITHIN SCHOOL SYSTEM (SUMMARY INFORMATION)	103	Op
1 53 10.	PROGRAMS OF STUDIES WITHIN SCHOOL SYSTEM (SUMMARY INFORMATION)	103	Op
1 54 10.	SCHOOL SERVICES SUPPORTING INSTRUCTION WITHIN SCHOOL SYSTEM (SUMMARY INFORMATION)	103	Op
1 55 10.	PUPIL MEMBERSHIP WITHIN SCHOOL SYSTEM (SUMMARY INFORMATION)	104	Rec
1 56 10.	INSTRUCTIONAL STAFF MEMBERS WITHIN SCHOOL SYSTEM (SUMMARY INFORMATION)	104	Rec
1 99 00.	OTHER INFORMATION ABOUT SCHOOL SYSTEM	105	Op

ITEMS DESCRIBING A SCHOOL
20000 Series

A school is a division of the school system consisting of pupils comprising one or more grade groups or other identifiable groupings, organized as one unit with one or more teachers to give instruction of a defined type, and housed in a school plant of one or more buildings. Items of information included in the 20000 Series may be used to describe aspects of curriculum and instruction within an individual school, including situations in which a single school comprises the entire school system or an entire level of organization of a school system.

Items of information used in describing the details of individual programs of studies are not included here but are included in the 30000 Series; those describing individual self-contained classes, courses, or cocurricular activities are in the 40000 Series; and those used in scheduling sections and service activities are included in the 50000 Series.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult educati9n
2 02 00.	IDENTIFICATION OF SCHOOL	59				
2 02 11.	Name of school	59	Rec	Rec	Rec	Rec
2 02 21.	Standard school number or code	59	Rec	Rec	Rec	Rec
2 02 22.	Local number or code	59	Rec	Rec	Rec	Rec
2 02 31.	Geographical location of school	59	Op	Op	Op	Op
2 02 42.	Type of school organizational arrangement	60				
2 02 42.10	Elementary school	60	Rec	----------	----------	----------
2 02 42.11	Preprimary level	60	Rec	----------	----------	----------
2 02 42.12	Primary level	60	Op	----------	----------	----------
2 02 42.13	Intermediate elementary level	60	Op	----------	----------	----------
2 02 42.14	Upper elementary level	60	Op	----------	----------	----------
2 02 42.20	Middle school	60	Rec[4]	Rec[4]	----------	----------
2 02 42.30	Secondary school	60				
2 02 42.31	Junior high school	60	----------	Rec	----------	----------
2 02 42.32	5- or 6-year high school	60	----------	Rec	----------	----------
2 02 42.33	Junior-senior high school	60	----------	Rec	----------	----------
2 02 42.34	Senior high school	60	----------	Rec	----------	----------
2 02 42.35	4-year high school	60	----------	Rec	----------	----------
2 02 42.39	Other secondary school	60	----------	Rec	----------	----------
2 02 42.40	Junior college	61	----------	----------	Rec	----------
2 02 42.41	Public junior college	61	----------	----------	Rec	----------
2 02 42.42	Nonpublic junior college	61	----------	----------	Rec	----------

---

[4] Recommended for middle school instructional program.

	Classification of items of information	Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 02 42.43	2-year technical institute	61	------	------	Rec	------
2 02 42.44	2-year branch college	61	------	------	Rec	------
2 02 42.49	Other junior college	61	------	------	Rec	------
2 02 42.50	Adult school or adult education organizational arrangement	61	------	------	------	Rec
2 02 42.81	Day school	61	Op	Op	Op	Op
2 02 42.82	Residential school	61	Op	Op	Op	Op
2 02 42.83	Area school	61	Op	Op	Op	Op
2 02 42.84	Vocational and/or technical school	61	------	Op	Op	Op
2 02 42.90	Other school	61	Rec	Rec	Rec	Rec
2 02 50.	Control of school	62				
2 02 51.	Public control	62	Rec	Rec	Rec	Rec
2 02 52.	Nonpublic control	63	Rec	Rec	Rec	Rec
2 02 52.10	Independent of church, nonprofit	63	Rec	Rec	Rec	Rec
2 02 52.20	Religious group	63	Rec	Rec	Rec	Rec
2 02 52.30	Proprietary	63	Rec	Rec	Rec	Rec
2 02 53.	Combined public and nonpublic control	63	Rec	Rec	Rec	Rec
2 02 54.	Control by institution	63	Rec	Rec	Rec	Rec
2 02 59.	Other control	63	Rec	Rec	Rec	Rec
2 03 00.	SPAN OF AGES, GRADES, AND/OR YEARS IN SCHOOL	63				
2 03 12.	Span of permissive attendance ages	64				
2 03 21.	Lowest and highest grades in school	64				
2 03 21.93	Prekindergarten, age 3	64	Rec	------	------	------
2 03 21.92	Prekindergarten, age 4	64	Rec	------	------	------
2 03 21.91	Kindergarten	64	Rec	------	------	------
2 03 21.01	Grade 1	64	Rec	------	------	------
2 03 21.02	Grade 2	64	Rec	------	------	------
2 03 21.03	Grade 3	64	Rec	------	------	------
2 03 21.04	Grade 4	64	Rec	------	------	------
2 03 21.05	Grade 5	64	Rec	------	------	------
2 03 21.06	Grade 6	64	Rec	------	------	------
2 03 21.07	Grade 7	64	Rec	Rec	------	Op
2 03 21.08	Grade 8	64	Rec	Rec	------	Op
2 03 21.09	Grade 9	64	------	Rec	------	Op
2 03 21.10	Grade 10	64	------	Rec	------	Op
2 03 21.11	Grade 11	64	------	Rec	------	Op
2 03 21.12	Grade 12	64	------	Rec	------	Op
2 03 21.13	Grade 13	64	------	------	Rec	Op
2 03 21.14	Grade 14	64	------	------	Rec	------
2 03 21.15	Grade 15	64	------	------	Rec	------
2 03 21.16	Grade 16	64	------	------	Rec	------
2 03 21.20	Grade 16+	64	------	------	Rec	------
2 03 21.30	Ungraded	64	Rec	Rec	------	------
2 03 31.	Lowest and highest years	65				
2 03 31.10	1st year	65	Rec	Rec	------	------
2 03 31.20	2d year	65	Rec	Rec	------	------
2 03 31.30	3d year	65	Rec	Rec	------	------
2 03 31.40	4th year	65	Rec	Rec	------	------
2 03 31.50	5th year	65	Rec	Rec	------	------
2 03 31.60	6th year	65	Rec	Rec	------	------
2 03 31.70	7th year	65	Rec	Rec	------	------
2 03 31.80	8th year	65	Rec	Rec	------	------
2 03 31.90	9th year and above	65	Rec	Rec	------	------
2 03 40.	Other placement	65	Rec	Rec	Rec	Rec
2 05 00.	ACCREDITATION AND/OR APPROVAL OF SCHOOL	65				
2 05 10.	Approval status	66	Rec	Rec	Rec	Rec

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 05 20.	Approving agency	66	Rec	Rec	Rec	Rec
2 05 30.	Accreditation status	66				
2 05 30.10	Accredited	66	Rec	Rec	Rec	Rec
2 05 30.20	Warning or probation	66	Rec	Rec	Rec	Rec
2 05 30.30	Accreditation denied	66	Rec	Rec	Rec	Rec
2 05 30.40	Application in process	66	Rec	Rec	Rec	Rec
2 05 30.50	Accreditation not requested	66	Rec	Rec	Rec	Rec
2 05 30.60	Accreditation not available	66	Rec	Rec	Rec	Rec
2 05 40.	Accrediting agency	66				
2 05 40.10	State department of education	66	Rec	Rec	Rec	Rec
2 05 40.20	Regional accrediting association	66	Rec	Rec	Rec	Rec
2 05 40.90	Other agency	66	Rec	Rec	Rec	Rec
2 06 00.	SCHOOL TIME SCHEDULE	66				
2 06 11.	Division of school year	66	Rec	Rec	Rec	Rec
2 06 20.	Regular school term	67				
2 06 21.	Division of regular school term	67				
2 06 21.10	Single term	67	Rec	Rec	Rec	Rec
2 06 21.20	Semesters	67	----------	Rec	Rec	Rec
2 06 21.30	Trimesters	67	----------	----------	Rec	Rec
2 06 21.40	Quarters	67	----------	----------	Rec	Rec
2 06 21.90	Other division	67	Rec	Rec	Rec	Rec
2 06 22.	Calendar months in regular school term	67	Op	Op	Op	Op
2 06 23.	Equivalent weeks in regular school term	67	Op	Op	Op	Op
2 06 24.	Days in session in regular school term	67	Rec	Rec	Op	Op
2 06 30.	Summer school term	67				
2 06 32.	Calendar months in summer school term	67	Op	Op	Op	Op
2 06 33.	Calendar weeks in summer school term	67	Op	Op	Op	Op
2 06 34.	Days in session in summer school term	67	Op	Op	Op	Op
2 06 40.	School day	67				
2 06 41.	Sessions in school day	68				
2 06 41.10	Single (1) session	68	Rec	Rec	----------	----------
2 06 41.20	Double (2) sessions	68	Rec	Rec	----------	----------
2 06 41.30	2 overlapping sessions	68	Rec	Rec	----------	----------
2 06 41.40	3 or more overlapping sessions	68	Rec	Rec	----------	----------
2 06 41.90	Other organization	68	Rec	Rec	----------	----------
2 06 45.	Minutes in school day	68				
2 06.45.01	Less than 240 minutes	68	Op	Op	Op	Op
2 06 45.02	240 to 269 minutes	68	Op	Op	Op	Op
2 06 45.03	270 to 299 minutes	68	Op	Op	Op	Op
2 06 45.04	300 to 329 minutes	68	Op	Op	Op	Op
2 06 45.05	330 to 359 minutes	68	Op	Op	Op	Op
2 06 45.06	360 to 419 minutes	68	Op	Op	Op	Op
2 06 45.07	420 to 479 minutes	68	Op	Op	Op	Op
2 06 45.08	480 to 539 minutes	68	Op	Op	Op	Op
2 06 45.09	540 minutes and more	98	Op	Op	Op	Op
2 06 50.	Daily session	68				
2 06 51.	Type of session	68				
2 06 51.10	Full-day session	68	Rec	Rec	----------	----------
2 06 51.20	Half-day session	68	Rec	----------	----------	----------
2 06 51.30	Curtailed session	68	Rec	Rec	----------	----------
2 06 51.90	Other type of session	68	Rec	Rec	----------	----------
2 06.52	Organization of time segments in session	68				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 06 52.10	Entire session (self-contained class)	68	Rec	Rec	---------	---------
2 06 52.20	Partially departmentalized session	68	Rec	Rec	---------	---------
2 06 52.30	Uniform class periods	68	---------	Rec	---------	---------
2 06 52.31	Single period	68	---------	Op	---------	---------
2 06 52.32	Multiple periods (block of time)	68	---------	Op	---------	---------
2 06 52.33	Combination of single and multiple periods	68	---------	Op	---------	---------
2 06 52.40	Nonuniform class periods	68	---------	Rec	---------	---------
2 06 52.50	Modules of time	68	Rec	Rec	---------	---------
2 06 52.60	Combination of class periods and modules	68	Rec	Rec	---------	---------
2 06 52.70	Homeroom period	68	---------	Rec	---------	---------
2 06 52.80	Activity and/or assembly period	69	---------	Rec	---------	---------
2 06 52.90	Other organization	69	---------	Rec	---------	---------
2 06 55.	Minutes in session	69				
2 06 55.01	Less than 180 minutes	69	Rec	Rec	---------	---------
2 06 55.02	180 to 239 minutes	69	Rec	Rec	---------	---------
2 06 55.03	240 to 299 minutes	69	Rec	Rec	---------	---------
2 06 55.04	300 to 359 minutes	69	Rec	Rec	---------	---------
2 06 55.05	360 to 389 minutes	69	Rec	Rec	---------	---------
2 06 55.06	390 to 419 minutes	69	Rec	Rec	---------	---------
2 06 55.07	420 to 449 minutes	69	Rec	Rec	---------	---------
2 06 55.08	450 to 479 minutes	69	Rec	Rec	---------	---------
2 06 55.09	480 minutes and more	69	Rec	Rec	---------	---------
2 06 56.	Minutes of instruction in session	69	Rec	Rec	---------	---------
2 06 60.	Class period	69				
2 06 65.	Minutes in class period	69				
2 06 65.01	Less than 40 minutes	69	---------	Rec	Rec	---------
2 06 65.02	40 to 44 minutes	69	---------	Rec	Rec	---------
2 06 65.03	45 to 49 minutes	69	---------	Rec	Rec	---------
2 06 65.04	50 to 54 minutes	69	---------	Rec	Rec	---------
2 06 65.05	55 to 59 minutes	69	---------	Rec	Rec	---------
2 06 65.06	60 to 64 minutes	69	---------	Rec	Rec	---------
2 06 65.07	65 to 74 minutes	69	---------	Rec	Rec	---------
2 06 65.08	75 to 94 minutes	69	---------	Rec	Rec	---------
2 06 65.09	95 minutes and more	69	---------	Rec	Rec	---------
2 06 66.	Number of class periods in typical daily session	69				
2 06 66.02	1 or 2 class periods	69	---------	Rec	Rec	---------
2 06 66.03	3 class periods	69	---------	Rec	Rec	---------
2 06 66.04	4 class periods	69	---------	Rec	Rec	---------
2 06 66.05	5 class periods	69	---------	Rec	Rec	---------
2 06 66.06	6 class periods	69	---------	Rec	Rec	---------
2 06 66.07	7 class periods	69	---------	Rec	Rec	---------
2 06 66.08	8 class periods	69	---------	Rec	Rec	---------
2 06 66.09	9 or more class periods	69	---------	Rec	Rec	---------
2 06 66.01	Irregular number of class periods	69	---------	Rec	Rec	---------
2 06 67.	Number of class periods in typical week	69	---------	Rec	Rec	---------
2 06 70.	Module of time	69				
2 06 71.	Variation in modules	69				
2 06 71.10	No variation	69	---------	Rec	---------	---------
2 06 71.20	Varying for different groups	69	---------	Rec	---------	---------
2 06 75.	Minutes in module	69				
2 06 75.01	Less than 10 minutes	69	---------	Rec	---------	---------
2 06 75.02	10 and 11 minutes	69	---------	Rec	---------	---------
2 06 75.03	12 to 14 minutes	69	---------	Rec	---------	---------

	Classification of items of information	Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 06 75.04	15 to 19 minutes	69		Rec		
2 06 75.05	20 to 29 minutes	69		Rec		
2 06 75.06	30 minutes and more	69		Rec		
2 06 76.	Number of modules in typical daily session	69				
2 06 76.01	Less than 5 modules	69		Rec		
2 06 76.02	5 to 7 modules	69		Rec		
2 06 76.03	8 to 10 modules	69		Rec		
2 06 76.04	11 to 13 modules	69		Rec		
2 06 76.05	14 to 16 modules	69		Rec		
2 06 76.06	17 to 19 modules	69		Rec		
2 06 76.07	20 to 22 modules	69		Rec		
2 06 76.08	23 to 25 modules	69		Rec		
2 06 76.09	26 modules and more	69		Rec		
2 06 77.	Number of modules in typical week	69		Rec		
2 06 78.	Usual number of modules per day for unit of value	69				
2 06 78.02	2 modules	70		Rec		
2 06 78.03	3 modules	70		Rec		
2 06 78.04	4 modules	70		Rec		
2 06 78.05	5 modules	70		Rec		
2 06 78.06	6 modules	70		Rec		
2 06 78.07	7 modules	70		Rec		
2 06 78.08	8 modules	70		Rec		
2 06 78.09	9 modules	70		Rec		
2 06 78.01	More than 9 modules	70		Rec		
2 06 90.	Other time elements	71	Op	Op	Op	Op
2 07 00.	EVALUATION AND CURRICULUM IMPROVEMENT OF SCHOOL	71				
2 07 10.	Background of the instructional program	71				
2 07 10.11	Philosophy of the school system	71	Op	Op	Op	Op
2 07 10.12	Philosophy of the school	71	Op	Op	Op	Op
2 07 10.13	Aims of the school system	71	Op	Op	Op	Op
2 07 10.14	Aims and objectives of the school	71	Op	Op	Op	Op
2 07 10.21	School system policies	71	Op	Op	Op	Op
2 07 10.22	Rules and regulations of school	71	Op	Op	Op	Op
2 07 10.30	Characteristics of the school community	71	Rec	Rec	Rec	Rec
2 07 10.31	General type of community	71	Op	Op	Op	Op
2 07 10.32	Composition of population	71	Op	Op	Op	Op
2 07 10.33	Occupational structure of school community	71	Op	Op	Op	Op
2 07 10.34	Educational level of parents	72	Op	Op	Op	Op
2 07 10.35	Problems of the school community	72	Op	Op	Op	Op
2 07 10.36	Needs of the school community	72	Op	Op	Op	Op
2 07 10.39	Other characteristics	72	Op	Op	Op	Op
2 07 10.40	School-community relations	72	Rec	Rec	Rec	Rec
2 07 10.41	Community opinion	72	Op	Op	Op	Op
2 07 10.42	School-community planning	72	Op	Op	Op	Op
2 07 10.43	Home-school relations	72	Op	Op	Op	Op
2 07 10.44	Participation of parents in school activities and affairs	72	Op	Op	Op	Op
2 07 10.49	Other aspects of school-community relations	72	Op	Op	Op	Op
2 07 10.50	Characteristics and needs of the pupils	72	Rec	Rec	Rec	Rec
2 07 10.51	Scholastic aptitude	72	Op	Op	Op	Op
2 07 10.52	Exceptionality	72	Rec	Rec	Rec	Rec
2 07 10.53	School placement	72	Op	Op	Op	Op
2 07 10.54	Educational and career intentions	72	Op	Op	Op	Op
2 07 10.55	School performance	72	Op	Op	Op	Op
2 07 10.56	Nonschool performance	72	Op	Op	Op	Op
2 07 10.57	Postschool performance	72	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 07 10.58	Mobility/stability	72	Op	Op	Op	Op
2 07 10.59	Pupil needs	72	Op	Op	Op	Op
2 07 10.61	Pupil morale	72	Op	Op	Op	Op
2 07 10.62	Pupil-staff relations	73	Op	Op	Op	Op
2 07 10.69	Other characteristics and needs	73	Op	Op	Op	Op
2 07 10.70	Provisions for curriculum improvement	73	Rec	Rec	Rec	Rec
2 07 10.80	Provisions for improving teaching	73	Rec	Rec	Rec	Rec
2 07 10.90	Other background considerations	73	Op	Op	Op	Op
2 07 20.	Organization for evaluation and/or curriculum improvement	73	Op	Op	Op	Op
2 07 30.	Persons or groups involved in evaluation and/or curriculum improvement	73	Op	Op	Op	Op
2 07 40.	Evaluation procedures	74	Op	Op	Op	Op
2 07 41.	Frequency of evaluation	74	Op	Op	Op	Op
2 07 42.	Data collection media	74	Op	Op	Op	Op
2 07 43.	Use of data collection findings	74	Op	Op	Op	Op
2 07 44.	Interpretation of outcomes	74	Op	Op	Op	Op
2 07 50.	Aspects of the instructional program evaluated	74				
2 07 51.	Instructional content	74				
2 07 51.10	Scope of instructional content	75	Op	Op	Op	Op
2 07 51.20	Subject-matter areas and courses	75	Op	Op	Op	Op
2 07 51.30	Cocurricular activities	75	Op	Op	Op	Op
2 07 51.40	Articulation of elements of the instructional program	75	Op	Op	Op	Op
2 07 51.90	Other aspects of instructional content	75	Op	Op	Op	Op
2 07 52.	Instructional resources	75				
2 07 52.10	Instructional staff	75	Rec	Rec	Rec	Rec
2 07 52.20	Services supporting instruction	75	Op	Op	Op	Op
2 07 52.30	Administration	76	Rec	Rec	Rec	Rec
2 07 52.31	Numerical adequacy of administrative staff of school	76	Op	Op	Op	Op
2 07 52.32	Scheduling pupils and staff into classes and services	76	Op	Op	Op	Op
2 07 52.33	Organization for administration	76	Op	Op	Op	Op
2 07 52.39	Other administrative factors	76	Op	Op	Op	Op
2 07 52.40	Facilities	76	Op	Op	Op	Op
2 07 52.50	Movable equipment	76	Op	Op	Op	Op
2 07 52.60	Supplies	76	Op	Op	Op	Op
2 07 52.61	Provisions for textbooks for pupils	76	Op	Op	Op	Op
2 07 52.71	Finances	76	Op	Op	Op	Op
2 07 52.72	Salaries	76	Op	Op	Op	Op
2 07 52.80	Community resources	76	Op	Op	Op	Op
2 07 52.90	Other instructional resources	76	Op	Op	Op	Op
2 07 53.	Instructional processes	76				
2 07 53.10	Medium of instruction	76	Op	Op	Op	Op
2 07 53.20	Methods of instruction	76	Op	Op	Op	Op
2 07 53.21	Grouping practices in scheduling classes	76	Op	Op	Op	Op
2 07 53.90	Other aspects of instructional processes	76	Op	Op	Op	Op
2 07 54.	Factors evaluated in programs of studies and in self-contained classes, courses, and cocurricular activities	76				
2 07 54.10	Characteristics of staff	77	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 07 54.20	Instructional content	77	Op	Op	Op	Op
2 07 54.30	Resource utilization	77	Op	Op	Op	Op
2 07 54.40	Instructional processes	77	Op	Op	Op	Op
2 07 54.90	Other factors	77	Op	Op	Op	Op
2 07 55.	Factors evaluated in instructional services	77				
2 07 55.10	Characteristics of the staff	77	Op	Op	Op	Op
2 07 55.20	Nature of service provided	77	Op	Op	Op	Op
2 07 55.30	Resource utilization	77	Op	Op	Op	Op
2 07 55.90	Other factors	77	Op	Op	Op	Op
2 07 60.	Curriculum improvement activity	77	Op	Op	Op	Op
2 07 70.	Scope of curriculum improvement activity	77	Op	Op	Op	Op
2 07 71.	Span of levels, grades, and years	77	Op	Op	Op	Op
2 07 72.	Scope of content	78	Op	Op	Op	Op
2 07 80.	Content of reproduced materials	78	Op	Op	Op	Op
2 07 90.	Other aspects of evaluation and curriculum improvement	78	Op	Op	Op	Op
2 08 00.	EVALUATING AND REPORTING PUPIL PROGRESS	78				
2 08 10.	Unit of value	78				
2 08 11.	Terminology used for unit of value	78				
2 08 11.10	Unit	78	----------	Op	----------	----------
2 08 11.20	Credit	78	----------	Op	----------	----------
2 08 11.30	Semester credit hour	78	----------	Op	----------	----------
2 08 11.40	Quarter credit hour	78	----------	Op	----------	----------
2 08 11.50	Accomplishment unit	78	----------	Op	----------	----------
2 08 11.90	Other term	78	----------	Op	----------	----------
2 08 12.	Class periods or modules per week per unit of value	78				
2 08 12.01	1 class period	78	----------	Rec	Rec	Op
2 08 12.02	2 or 3 class periods	78	----------	Rec	Rec	Op
2 08 12.03	4 class periods	78	----------	Rec	Rec	Op
2 08 12.04	5 class periods	78	----------	Rec	Rec	Op
2 08 12.05	6 or 7 class periods	78	----------	Rec	Rec	Op
2 08 12.06	8 or 9 class periods	78	----------	Rec	Rec	Op
2 08 12.07	10 to 13 class periods	78	----------	Rec	Rec	Op
2 08 12.08	14 to 16 class periods	78	----------	Rec	Rec	Op
2 08 12.09	17 class periods and over	78	----------	Rec	Rec	Op
2 08 12.11	8 or fewer modules	78	----------	Rec	Rec	Op
2 08 12.12	9 or 10 modules	78	----------	Rec	Rec	Op
2 08 12.13	11 or 12 modules	78	----------	Rec	Rec	Op
2 08 12.14	13 to 15 modules	78	----------	Rec	Rec	Op
2 08 12.15	16 modules	78	----------	Rec	Rec	Op
2 08 12.16	17 to 20 modules	78	----------	Rec	Rec	Op
2 08 12.17	21 to 24 modules	78	----------	Rec	Rec	Op
2 08 12.18	25 to 29 modules	78	----------	Rec	Rec	Op
2 08 12.19	30 or more modules	78	----------	Rec	Rec	Op
2 08 13.	Minutes per week per unit of value	79				
2 08.13.01	Less than 60 minutes	79	----------	Rec	Rec	Op
2 08 13.02	60 to 119 minutes	79	----------	Rec	Rec	Op
2 08 13.03	120 to 179 minutes	79	----------	Rec	Rec	Op
2 08 13.04	180 to 239 minutes	79	----------	Rec	Rec	Op
2 08 13.05	240 to 299 minutes	79	----------	Rec	Rec	Op
2 08 13.06	300 to 359 minutes	79	----------	Rec	Rec	Op
2 08 13.07	360 to 479 minutes	79	----------	Rec	Rec	Op
2 08 13.08	480 to 599 minutes	79	----------	Rec	Rec	Op
2 08 13.09	600 minutes and more	79	----------	Rec	Rec	Op
2 08 14.	Portion of regular school term for unit of value	79				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 08 14.10	1 regular school term	79	--------	Rec	Rec	Op
2 08 14.20	½ regular school term	79	--------	Rec	Rec	Op
2 08 14.30	⅓ regular school term	79	--------	Rec	Rec	Op
2 08 14.90	Other portion of regular school term	79	--------	Rec	Rec	Op
2 08 15.	Variations in units of value	79				
2 08 15.10	Units of value do not vary	79	--------	Op	--------	--------
2 08 15.20	Units of value vary among programs of study	79	--------	Op	--------	--------
2 08 15.30	Units of value vary among courses	79	--------	Op	--------	--------
2 08 30.	Marking scale	79				
2 08 30.10	Letters	79	Op	Op	Op	Op
2 08 30.20	Numbers	79	Op	Op	Op	Op
2 08 30.30	2-word scale	79	Op	Op	Op	Op
2 08 30.40	Standard words or phrases	79	Op	Op	Op	Op
2 08 30.50	Percentages	79	Op	Op	Op	Op
2 08 30.60	Descriptive comments	79	Op	Op	Op	Op
2 08 30.90	Other scale	79	Op	Op	Op	Op
2 08 40.	Mark value for courses of school	79				
2 08 40.10	Mark value does not vary	79	--------	Op	--------	--------
2 08 40.20	Mark value varies among programs of studies	79	--------	Op	--------	--------
2 08 40.30	Mark value varies among courses	79	--------	Op	--------	--------
2 08 40.40	Mark value varies among sections of courses	79	--------	Op	--------	--------
2 08 50.	Number of pupil reports	79				
2 08 50.10	For regular school term	79				
2 08 50.11	1 report	79	Op	Op	--------	--------
2 08 50.12	2 reports	79	Op	Op	--------	--------
2 08 50.13	3 reports	79	Op	Op	--------	--------
2 08 50.14	4 reports	79	Op	Op	--------	--------
2 08 50.15	5 reports	79	Op	Op	--------	--------
2 08 50.16	6 reports	79	Op	Op	--------	--------
2 08 50.18	8 reports	79	Op	Op	--------	--------
2 08 50.17	Other number of reports	79	Op	Op	--------	--------
2 08 50.19	As required	79	Op	Op	--------	--------
2 08 50.20	For summer school term	79	Op	Op	--------	--------
2 08 60.	Means of reporting	80				
2 08 60.10	Report card	80				
2 08 60.20	Letter or note	80	Op	Op	--------	--------
2 08 60.30	Parent conference	80	Op	Op	--------	--------
2 08 60.90	Other means of reporting	80	Op	Op	--------	--------
2 08 70.	Mark-point average	80				
2 08 71.	Frequency of computation	80				
2 08 71.10	Once in regular school term	80	--------	Op	--------	--------
2 08 71.20	Once in subdivision of regular school term	80	--------	Op	--------	--------
2 08 71.30	Every marking period	80	--------	Op	--------	--------
2 08 71.40	Other frequency	80	--------	Op	--------	--------
2 08 71.90	Mark-point average not computed	80	--------	Op	--------	--------
2 08 72.	Courses included in mark-point average	80				
2 08 72.10	Every course	80	--------	Op	--------	--------
2 08 72.20	Not every course	80	--------	Op	--------	--------
2 08 80.	Honor roll	80				
2 08 81.	Frequency of honor roll	80				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 08 81.10	Once in regular term	80	----------	Op	----------	----------
2 08 81.20	Once in subdivision of regular school term	80	----------	Op	----------	----------
2 08 81.30	Every marking period	80	----------	Op	----------	----------
2 08 81.40	Once every marking period and semester or quarter	80	----------	Op	----------	----------
2 08 81.80	Other frequency	80	----------	Op	----------	----------
2 08 81.90	Honor roll not prepared	80	----------	Op	----------	----------
2 09 00.	PUPILS SERVED	80				
2 09 10.	Number of pupils served	80				
2 09 11.	Fall membership of school	80	Rec	Rec	Rec	Rec
2 09 12.	Full-time pupils	80	----------	----------	Rec	Op
2 09 13.	Part-time pupils	80	----------	----------	Rec	Op
2 09 14.	Full-time equivalency of pupils	80	----------	----------	Op	Op
2 09 20.	Basis for selection or grouping	80	Rec	Rec	Rec	Rec
2 09 20.10	Unselected grouping	80	Rec	Rec	Rec	Rec
2 09 20.20	Selected grouping	80	Rec	Rec	Rec	Rec
2 09 30.	Sex of pupils	80				
2 09 30.10	Both males and females	80				
2 09 30.11	Coeducational	81	Rec	Rec	Rec	Rec
2 09 30.12	Coordinate	81	Rec	Rec	Rec	Rec
2 09 30.20	Males only	81	Rec	Rec	Rec	Rec
2 09 30.30	Females only	81	Rec	Rec	Rec	Rec
2 09 40.	Pupil background	81				
2 09 41.	Race	81	Op	Op	Op	Op
2 09 42.	Ethnic origin	81	Op	Op	----------	Op
2 09 43.	Religion	81	Op	Op	Op	Op
2 09 44.	Socioeconomic background	81	Op	Op	----------	Op
2 09 45.	Cultural handicaps	81	Op	Op	----------	Op
2 09 49.	Other background factors	81	Op	Op	Op	Op
2 09 50.	Pupils within the normal range of ability and performance	81	Rec	Rec	Rec	Rec
2 09 60.	Pupils outside the normal range of ability and performance	82	Rec	Rec	Rec	Rec
2 10 00.	ENTRANCE INTO SCHOOL	83	Rec	Rec	Rec	Rec
2 10 10.	Requirements for entrance into school	83				
2 10 10.01	Location of residence	83	Op	Op	Op	Op
2 10 10.04	Achievement in schoolwork	83	----------	Op	Op	Op
2 10 10.05	Age	83	Op	Op	Op	Op
2 10 10.06	Court commitment	83	Op	Op	----------	Op
2 10 10.09	Grade or year standing	83	----------	Op	Op	
2 10 10.11	Payment of tuition	83	Rec	Rec	Rec	Rec
2 10 10.12	Recommendation of psychologist	83	Rec	Rec	----------	----------
2 10 10.13	Recommendation of teachers, counselor, and/or principal	83	----------	Rec	Rec	
2 10 10.14	Special pupil ability, aptitude, or interest	83	Op	Op	Op	Op
2 10 10.15	Special pupil need	83	Rec	Rec	----------	----------
2 10 10.16	Successful completion of entrance examination or other test	83	----------	Op	Op	Op
2 10 10.99	Other requirements and procedures	83	Rec	Rec	Op	Op
2 10 30.	Orientation practices	84	Op	Op	Op	Op
2 11 00.	PROGRESS AND PROMOTION PRACTICES OF SCHOOL	84				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 11 10.	Type of promotion practice	84				
2 11 10.10	Regular promotion	84	Op	Op	----------	----------
2 11 10.20	Accelerated promotion	84	Op	----------	----------	----------
2 11 10.30	Continuous promotion	84	Op	----------	----------	----------
2 11 10.40	Nonpromotion	84	Op	----------	----------	----------
2 11 10.50	Probationary promotion	84	Op	----------	----------	----------
2 11 10.60	Variable progress	84	Op	----------	----------	----------
2 11 10.90	Other type of promotion	84	Op	----------	----------	----------
2 11 20.	Bases for promotion	84				
2 11 20.10	Achievement	84	Op	Op	----------	----------
2 11 20.20	Chronological age	84	Op	Op	----------	----------
2 11 20.30	Intellectual development	84	Op	Op	----------	----------
2 11 20.40	Social maturity	84	Op	Op	----------	----------
2 11 20.50	Time in class	84	Op	Op	----------	----------
2 11 20.90	Other basis	84	Op	Op	----------	----------
2 11 30.	Promotion period	84				
2 11 30.10	Annual	84	Op	Op	Op	----------
2 11 30.20	Semiannual	84	Op	Op	Op	
2 11 30.30	Flexible	84	Op	Op	----------	----------
2 11 30.90	Other period	84	Op	Op	Op	----------
2 12 00.	GRADUATION AND OTHER TERMINATION PRACTICES OF SCHOOL	84				
2 12 10.	Requirements for graduation	84				
2 12 10.10	Completion of minimum number of units of value	85	----------	Rec	Rec	Rec
2 12 10.20	General performance or achievement in schoolwork	85	----------	Rec	Rec	Rec
2 12 10.30	Equivalency examination	85	----------	Rec	----------	Rec
2 12 10.40	Age	85	Op	Op	----------	----------
2 12 10.50	Duration of time	85	Op	Op	----------	----------
2 12 10.90	Other requirements	85	----------	Rec	Rec	Rec
2 12 21.	Recognition for graduation	85				
2 12 21.10	High school diploma	85	----------	Rec	----------	Rec
2 12 21.11	Uniform high school diploma	85	----------	Rec	----------	Rec
2 12 21.12	Differentiated high school diplomas	85	----------	Rec	----------	Rec
2 12 21.20	Certificate of high school equivalency	85	----------	Rec	----------	Rec
2 12 21.30	Certificate of completion	85	Rec	Rec	Rec	Rec
2 12 21.40	Certificate of attendance	85	----------	Rec	----------	Rec
2 12 21.50	Associate degree	85	----------	----------	Rec	----------
2 12 21.60	Other certificate or degree	85	----------	Rec	Rec	Rec
2 12 21.70	Promotion to next school	85	Rec	Rec	Rec	----------
2 12 21.80	No recognition	85	Rec	Rec	----------	Rec
2 12 21.90	Other recognition	85	Rec	Rec	Rec	Rec
2 12 30.	Other termination practices	86				
2 12 31.	Type of practice	86				
2 12 31.10	Expulsion: unsatisfactory achievement	86	Op	Op	----------	----------
2 12 31.20	Expulsion: unsatisfactory behavior	86	Op	Op	----------	----------
2 12 31.30	Legal exclusion	86	Op	Op	----------	----------
2 12 31.40	Probation	86	Op	Op	----------	----------
2 12 31.50	Recommended transfer or other withdrawal	86	Op	Op	----------	----------
2 12 31.60	Suspension	86	Op	Op	----------	----------
2 12 31.90	Other practice	86	Op	Op	----------	----------
2 12 32.	Reason for terminating membership	86				
2 12 32.10	Underage	86	Op	Op	----------	----------
2 12 32.20	Overage	86	Op	Op	----------	----------

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 12 32.30	Behavioral difficulty	86	Op	Op	----------	----------
2 12 32.40	Mental illness	86	Op	Op	----------	----------
2 12 32.50	Mental retardation	86	Op	Op	----------	----------
2 12 32.60	Physical condition	86	Op	Op	----------	----------
2 12 32.90	Other reason	86	Op	Op	----------	----------
2 32 00.	SCHOOL SERVICES SUPPORTING INSTRUCTION	90				
2 32 10.	Resource services for pupils	90				
2 32 11.	School library services	90	Rec	Rec	Rec	Rec
2 32 11.10	Circulation services	91	Op	Op	Op	Op
2 32 11.30	Individual guidance in selection of books and materials	91	Op	Op	Op	Op
2 32 11.40	Instruction in use of library	91	Op	Op	Op	Op
2 32 11.70	Reference materials and services	91	Op	Op	Op	Op
2 32 11.80	Selection, acquisition, and preparation of materials for use by pupils	91	Op	Op	Op	Op
2 32 11.90	Other school library services	91	Op	Op	Op	Op
2 32 12.	Audiovisual services	91	Rec	Rec	Rec	Rec
2 32 12.10	Circulation services	91	Op	Op	Op	Op
2 32 12.30	Individual guidance in selection and use of materials	91	Op	Op	Op	Op
2 32 12.51	Materials and services for listening	91	Op	Op	Op	Op
2 32 12.52	Materials and services for viewing	91	Op	Op	Op	Op
2 32 12.60	Production services	91	Op	Op	Op	Op
2 32 12.80	Selection, acquisition, and preparation of materials for pupils	91	Op	Op	Op	Op
2 32 12.90	Other audiovisual services	91	Op	Op	Op	Op
2 32 13.	Provisions for textbooks	91	Rec	Rec	Rec	Rec
2 32 13.10	Free loan plan	91	Op	Op	Op	Op
2 32 13.20	Rental plan	91	Op	Op	Op	Op
2 32 13.30	Purchase plan	91	Op	Op	Op	Op
2 32 13.40	Combination of plans	91	Op	Op	Op	Op
2 32 13.90	Other plan	91	Op	Op	Op	Op
2 32 14.	Provisions for supplies	91	Op	Op	Op	Op
2 32 19.	Other resource services for pupils	91	Op	Op	Op	Op
2 32 20.	Pupil personnel services	91				
2 32 21.	Guidance services	91	Rec	Rec	Rec	Rec
2 32 21.10	Counseling with pupils	91	Rec	Rec	Rec	Rec
2 32 21.11	Educational counseling	91	Op	Op	Op	Op
2 32 21.12	Career counseling	91	Op	Op	Op	Op
2 32 21.13	Personal/social counseling	91	Op	Op	Op	Op
2 32 21.20	Counseling with parents	91	Rec	Rec	Rec	Op
2 32 21.30	Consultant service to staff members	91	Rec	Rec	Rec	Rec
2 32 21.31	Assistance with individual pupils	91	Op	Op	Op	Op
2 32 21.32	Inservice education on guidance services	91	Op	Op	Op	Op
2 32 21.33	Program development for guidance services	92	Op	Op	Op	Op
2 32 21.39	Other consultant services	92	Op	Op	Op	Op
2 32 21.40	Pupil appraisal services	92	Rec	Rec	Rec	Rec
2 32 21.50	Information service	92	Rec	Rec	Rec	Rec
2 32 21.51	Educational information	92	Op	Op	Op	Op
2 32 21.52	Occupational information	92	Op	Op	Op	Op
2 32 21.53	Personal and social information	92	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2 SCHOOL—Continued						
2 32 21.60	Maintenance and interpretation of cumulative records of individual pupils	92	Rec	Rec	Rec	Rec
2 32 21.61	Home and family background	92	Op	Op	Op	Op
2 32 21.62	Physical and medical status	92	Op	Op	Op	Op
2 32 21.63	Standardized test results	92	Op	Op	Op	Op
2 32 21.64	Personal and social development	92	Op	Op	Op	Op
2 32 21.65	School performance	92	Op	Op	Op	Op
2 32 21.69	Other factors	92	Op	Op	Op	Op
2 32 21.70	Placement services	92				
2 32 21.71	Educational placement service	92	----------	Rec	Rec	Rec
2 32 21.72	Occupational placement service	92	----------	Rec	Rec	Rec
2 32 21.81	Followup and evaluation services	92	Rec	Rec	Rec	Rec
2 32 21.82	Financial aid service	92	----------	Rec	Rec	Rec
2 32 21.91	Referral for additional guidance services	92	Rec	Rec	Rec	Rec
2 32 21.99	Other guidance services	92	Rec	Rec	Rec	Rec
2 32 22.	Health services	92	Rec	Rec	Rec	Rec
2 32 22.01	Compilation, maintenance, and use of pupil health records	92	Op	Op	Op	Op
2 32 22.10	Health appraisal	92	Op	Op	Op	Op
2 32 22.11	Vision screening	92	Op	Op	Op	Op
2 32 22.12	Hearing screening	92	Op	Op	Op	Op
2 32 22.13	Periodic physical examinations	92	Op	Op	Op	Op
2 32 22.14	Tuberculosis testing	92	Op	Op	Op	Op
2 32 22.19	Other screening and laboratory testing practices	92	Op	Op	Op	Op
2 32 22.21	Nurse services	92	Op	Op	Op	Op
2 32 22.22	Provision of care of emergency illness and injury	92	Op	Op	Op	Op
2 32 22.30	Inservice education on health services	92	Op	Op	Op	Op
2 32 22.40	Health counseling for individual pupils	92	Op	Op	Op	Op
2 32 22.50	Communications to parents about health problems of pupils	92	Op	Op	Op	Op
2 32 22.60	Dental services	92	Op	Op	Op	Op
2 32 22.61	Dental screening	92	Op	Op	Op	Op
2 32 22.62	Dental care	92	Op	Op	Op	Op
2 32 22.69	Other dental services	92	Op	Op	Op	Op
2 32 22.70	Psychiatric services	92	Op	Op	Op	Op
2 32 22.81	Immunization program	92	Op	Op	Op	Op
2 32 22.82	Prevention and control of communicable diseases	92	Op	Op	Op	Op
2 32 22.83	Adjusting programs to health needs of individual pupils	92	Op	Op	Op	Op
2 32 22.84	Promoting a healthful school environment	92	Op	Op	Op	Op
2 32 22.85	Food program for needy children	92	Op	Op	Op	Op
2 32 22.86	Referral for diagnosis or treatment	92	Op	Op	Op	Op
2 32 22.90	Other health services	93	Op	Op	Op	Op
2 32 23.	School psychological services	93	Rec	Rec	Rec	Rec
2 32 23.10	Administering psychological tests	93	Op	Op	Op	Op
2 32 23.20	Interpreting results of psychological testing	93	Op	Op	Op	Op
2 32 23.30	Psychological counseling	93	Op	Op	Op	Op
2 32 23.40	Psychotherapy	93	Op	Op	Op	Op
2 32 23.50	Working with other staff members	93	Op	Op	Op	Op
2 32 23.60	Referral of pupils for further clinical diagnosis or treatment	93	Op	Op	Op	Op
2 32 23.90	Other psychological services	93	Op	Op	Op	Op
2 32 24.	Speech pathology and audiology services	93	Op	Op	Op	Op
2 32 24.10	Speech pathology services	93	Op	Op	Op	Op
2 32 24.20	Audiology services	93	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 32 25.	School attendance and social work services	93	Rec	Rec	Rec	Rec
2 32 25.10	Attendance services	93	Rec	Rec		
2 32 25.20	School social work services	93	Rec	Rec	Rec	Rec
2 32 29.	Other pupil personnel services	93	Rec	Rec	Rec	Rec
2 32 30.	Services for instructional staff	93				
2 32 31.	School library services	93	Rec	Rec	Rec	Rec
2 32 31.10	Circulation materials and services	94	Op	Op	Op	Op
2 32 31.20	Consultant services to instructional staff	94	Op	Op	Op	Op
2 32 31.30	Guidance in selection of books and materials	94	Op	Op	Op	Op
2 32 31.70	Reference materials and services	94	Op	Op	Op	Op
2 32 31.80	Selection, acquisition, and preparation of materials for use by instructional staff	94	Op	Op	Op	Op
2 32 31.90	Other library services	94	Op	Op	Op	Op
2 32 32.	Audiovisual services	94	Rec	Rec	Rec	Rec
2 32 32.10	Circulation services	94	Op	Op	Op	Op
2 32 32.20	Consultant service and inservice education for instructional staff	94	Op	Op	Op	Op
2 32 32.51	Materials and services for listening	94	Op	Op	Op	Op
2 32 32.52	Materials and services for viewing	94	Op	Op	Op	Op
2 32 32.60	Production services	94	Op	Op	Op	Op
2 32 32.80	Selection, acquisition, and preparation of materials for use by instructional staff	94	Op	Op	Op	Op
2 32 32.90	Other audiovisual services	94	Op	Op	Op	Op
2 32 33.	Curriculum laboratory	94	Op	Op	Op	Op
2 32 34.	Other resource services	94	Op	Op	Op	Op
2 32 35.	Instructional supervision services	94	Rec	Rec	Rec	Rec
2 32 36.	Provisions for inservice education	94	Rec	Rec	Rec	Rec
2 32 36.01	Workshop	94	Op	Op	Op	Op
2 32 36.06	Staff meetings	94	Op	Op	Op	Op
2 32 36.07	Committee project	94	Op	Op	Op	Op
2 32 36.08	Group study activity	94	Op	Op	Op	Op
2 32 36.09	Helping teacher services	95	Op	Op	Op	Op
2 32 36.90	Other provisions for inservice education	95	Op	Op	Op	Op
2 32 39.	Other services for instructional staff	95	Rec	Rec	Rec	Rec
2 32 40.	Research and statistical services	95	Op	Op	Op	Op
2 32 50.	Data processing services	95	Op	Op	Op	Op
2 32 60.	Information services	96	Op	Op	Op	Op
2 32 70.	Community services	96	Rec	Rec	Rec	Rec
2 32 70.01	After school activities for pupils	96	Op	Op		
2 32 70.02	Civic activities	96	Op	Op	Op	Op
2 32 70.03	Community recreation programs	96	Op	Op	Op	Op
2 32 70.04	Community welfare activities	96	Op	Op	Op	Op
2 32 70.05	Facilities designed for community use as well as for school use	96	Op	Op	Op	Op
2 32 70.06	Facilities available for community use	96	Op	Op	Op	Op
2 32 70.07	Identification of community needs and interests	96	Op	Op	Op	Op
2 32 70.08	Library service to public	96	Op	Op	Op	Op
2 32 70.10	Services for nonpublic school pupils	96	Op	Op	Op	Op
2 32 70.11	Tutoring and homework help program	96	Op	Op		
2 32 70.90	Other community services	96	Op	Op	Op	Op
2 32 81.	Food services	96	Op	Op	Op	Op
2 32 81.10	Regular meals	96	Op	Op	Op	Op
2 32 81.20	Incidental meals and/or snacks	96	Op	Op	Op	Op
2 32 81.90	Other food services	96	Op	Op	Op	Op
2 32 82.	Pupil transportation services	96	Op	Op	Op	Op
2 32 90.	Other services supporting instruction	96	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
2	SCHOOL—Continued					
2 33 00.	COMMUNITY RESOURCES	96	Op	Op	Op	Op
2 34 00.	LOCATION OF INSTRUCTION	96				
2 34 10.10	School facility or facilities	97	Rec	Rec	Rec	Rec
2 34 10.20	Home of pupil	97	Rec	Rec	Rec	Rec
2 34 10.30	Hospital	97	Rec	Rec	Rec	Rec
2 34 10.40	Business, commercial, or industrial facility	97	Rec	Rec	Rec	Rec
2 34 10.90	Other nonschool location	97	Rec	Rec	Rec	Rec
2 35 10.	FACILITIES OF SCHOOL	97	Op	Op	Op	Op
2 41 00.	STRUCTURE OF PROGRAM OF STUDIES	100	Op	Op	----------	----------
2 53 20.	PROGRAMS OF STUDIES OF SCHOOL (SUMMARY INFORMATION)	103				
2 53 21.	Single program or multiple programs of studies	103				
2 53 21.10	Single program of studies	103	----------	Rec	----------	----------
2 53 21.20	Multiple programs of studies	103	----------	Rec	----------	----------
2 53 22.	Type(s) of program of studies	103	Rec	Rec	Rec	Rec
2 53 23.	Area(s) of specialization	103	----------	Op	Op	Op
2 55 30.	PUPIL MEMBERSHIP IN PROGRAMS OF STUDIES, COURSES, AND COCURRICULAR ACTIVITIES OF SCHOOL (SUMMARY INFORMATION)	104	Op	Op	Op	Op
2 56 20.	INSTRUCTIONAL STAFF MEMBERS WITHIN SCHOOL (SUMMARY INFORMATION)	104	Op	Op	Op	Op
2 57 20.	COURSES OFFERED BY SCHOOL (SUMMARY INFORMATION)	104	----------	Op	Op	Op
2 58 20.	COCURRICULAR ACTIVITIES PROVIDED BY SCHOOL (SUMMARY INFORMATION)	105	----------	Op	Op	Op
2 99 00.	OTHER INFORMATION ABOUT SCHOOL	105	Op	Op	Op	Op

ITEMS DESCRIBING A PROGRAM OF STUDIES

30000 Series

A program of studies is a combination of related courses and/or self-contained classes organized for the attainment of specific educational objectives, e.g., a program of special education for handicapped pupils, a college preparatory program, an occupational program (in a given occupation or cluster of occupations), a general education program, and a transfer program.

Items of information included in the 30000 Series may be used to describe aspects of each program of studies offered by a school. This includes items concerning the type of program, accreditation or approval, units of value or "credits," pupils served by the program, requirements for entrance into the program, requirements and recognition for completion, and the content of the program. Items of information used for describing the school providing each program of studies are included in the 20000 Series.

For certain types of schools, items of information descriptive of a "department" (e.g., of an English department or science department) may be drawn as appropriate from various portions of the handbook and included under this heading. Among such items are those used to describe departmental course offerings (see item X5740 of chapter 4), staff members (see the X5000 Series of chapter 4), facilities (the X3500 Series), and equipment and supplies (the X3600 Series).

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
3 02 00.	IDENTIFICATION OF PROGRAM OF STUDIES	59				
3 02 12.	Standard descriptive title	59	Rec	Rec	Rec	Rec
2 02 13.	Local descriptive title	59	Rec	Rec	Rec	Rec
3 02 22.	Local number or code	59	Rec	Rec	Rec	Rec
3 02 43.	Type of program of studies	61				
3 02 43.11	Typical local elementary program	61	Rec	----------	----------	----------
3 02 43.12	Typical local middle school program	61	Rec[5]	Rec[5]	----------	----------
3 02 43.13	Typical local junior high school program	61	----------	Rec	----------	----------
3 02 43.20	Program of special education for handicapped pupils	61	Rec	Rec	Rec	Rec
3 02 43.31	College preparatory program	61	----------	Rec	----------	----------
3 02 43.32	Provisions for postgraduate studies	61	----------	Rec	----------	----------
3 02 43.41	General education program	61	----------	Rec	Rec	Rec
3 02 43.42	Occupational program	62	----------	Rec	Rec	Rec
3 02 43.51	Transfer program	62	----------	----------	Rec	----------
3 02 43.61	Provisions for free selection	62	----------	----------	----------	Rec
3 02 43.71	Rehabilitation program	62	Rec	Rec	Rec	Rec
3 02 43.90	Other program of studies	62	Rec	Rec	Rec	Rec
3 02 44.	Combination of courses	62	----------	Op	Op	Op
3 02 70.	Contract for instruction or service	63				
3 02 71.10	Contract awarded to another agency	63	Rec	Rec	Rec	Rec
3 02 71.20	Contract awarded to this school, school system, or agency	63	Rec	Rec	Rec	Rec
3 02 72.	[illegible]rce or recipient of contract	63				
3 02 72.10	Public school or school system	63	Op	Op	Op	Op
3 02 72.20	Other public agency	63	Op	Op	Op	Op
3 02 72.30	Nonpublic school or school system	63	Op	Op	Op	Op
3 02 72.40	Other nonpublic agency	63	Op	Op	Op	Op
3 05 00.	ACCREDITATION AND/OR APPROVAL OF PROGRAM OF STUDIES	65				
3 05 10.	Approval status	66	Rec	Rec	Rec	Rec
3 05 20.	Approving agency	66	Rec	Rec	Rec	Rec
3 05 30.	Accreditation status	66	Rec	Rec	Rec	Rec
3 05 40.	Accrediting agency	66				
3 05 40.10	State department of education	66	----------	Rec	Rec	Rec
3 05 40.20	Regional accrediting association	66	----------	Rec	Rec	Rec
3 05 40.30	Professional association	66	----------	Rec	Rec	Rec
3 05 40.40	Technical and/or business association	66	----------	Rec	Rec	Rec
3 05 40.90	Other agency	66	----------	Rec	Rec	Rec
3 06 00.	TIME SCHEDULE	66				
3 06 52.	Organization of time segments in daily session	68				
3 06 52.10	Entire session (self-contained class)	68	----------	Op	----------	----------
3 06 52.20	Partially departmentalized session	68	----------	Op	----------	----------
3 06 52.30	Uniform class periods	68	----------	Op	----------	----------
3 06 52.31	Single period	68	----------	Op	----------	----------
3 06 52.32	Multiple periods (block of time)	68	----------	Op	----------	----------
3 06 52.33	Combination of single and multiple periods	68	----------	Op	----------	----------
3 06 52.40	Nonuniform class periods	68	----------	Op	----------	----------
3 06 52.50	Modules of time	68	----------	Op	----------	----------
3 06 52.60	Combination of class periods and modules	68	----------	Op	----------	----------
3 06 52.90	Other organization	69	----------	Op	----------	----------
3 06 55.	Minutes in session	69				
3 06 56.	Minutes of instruction in session	69	----------	Op	----------	Op
3 06 65.	Minutes in class period	69	----------	Op	----------	Op
3 06 66.	Number of class periods in typical daily session	69	----------	Op	----------	----------

---

[5] Recommended for middle school instructional program.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
3	PROGRAM OF STUDIES—Continued					
3 06 67.	Number of class periods in typical week	69	----	Op	Op	Op
3 06 70.	Module of time	69	----	Op	----	----
3 06 90.	Other time elements	71	Op	Op	Op	Op
3 07 00.	EVALUATION AND CURRICULUM IMPROVEMENT	71				
3 07 10.	Background of the instructional program	71	Op	Op	Op	Op
3 07 40.	Evaluation procedures	74	Op	Op	Op	Op
3 07 50.	Aspects of program of studies evaluated	74	Op	Op	Op	Op
3 07 60.	Curriculum improvement activity	77	Op	Op	Op	Op
3 07 90.	Other aspects of evaluation and curriculum improvement	78	Op	Op	Op	Op
3 08 00.	EVALUATING AND REPORTING PUPIL PROGRESS	78				
3 08 10.	Unit of value	78				
3 08 11.	Terminology used for unit of value	78	----	Op	Op	Op
3 08 12.	Class periods or modules per week per unit of value	78	----	Rec	Rec	Op
3 08 13.	Minutes per week per unit of value	79	----	Rec	Rec	Op
3 08 14.	Portion of regular school term for unit of value	79	----	Rec	Rec	Op
3 08 15.	Variations in units of value	79	----	Op	----	----
3 08 30.	Marking scale	79	Op	Op	Op	Op
3 08 40.	Mark value for courses	79	----	Op	----	----
3 08 60.	Means of reporting	80	Op	Op	----	----
3 08 70.	Mark-point average	80	----	Op	----	----
3 09 00.	PUPILS SERVED BY PROGRAM OF STUDIES	80				
3 09 10.	Number of pupils served	80	Op	Op	Op	Op
3 09 12.	Full-time pupils	80	----	----	Op	Op
3 09 13.	Part-time pupils	80	----	----	Op	Op
3 09 14.	Full-time equivalency of pupils	80	----	----	Op	Op
3 09 20.	Basis for selection or grouping	80	Op	Op	Op	Op
3 09 30.	Sex of pupils	80	Op	Op	Op	Op
3 09 40.	Pupil background	81				
3 09 45.	Cultural handicaps	81	Rec	Rec	----	Rec
3 09 45.10	Culturally disadvantaged	81	Rec	Rec	----	Rec
3 09 45.20	Inability to speak language of instruction	81	Rec	Rec	----	Rec
3 09 45.30	Migrant children	81	Rec	Rec	----	----
3 09 45.40	Functionally illiterate	81	----	----	----	Rec
3 09 45.90	Other cultural handicaps	81	Rec	Rec	----	----
3 09 49.	Other background factors	81	Op	Op	Op	Op
3 09 50.	Pupils within the normal range of ability and performance	81				
3 09 50.10	Ungrouped pupils within the normal range	81	Rec	Rec	Rec	Rec
3 09 50.20	Underachieving pupils	81	Rec	Rec	----	----
3 09 50.30	Slow learners	81	Rec	Rec	Op	Rec
3 09 50.90	Other groups of pupils within the normal range of ability and performance	81				
3 09 50.91	Prekindergarten age	81	Op	----	----	----
3 09 50.92	Former dropouts	81	----	Op	Op	Op
3 09 50.93	Employed youth under age 18	81	----	Op	----	Op
3 09 50.94	Pregnant girls	81	----	Op	----	Op
3 09 50.95	Adult age	81	----	Op	Op	Op
3 09 50.96	Parents	81	Op	Op	Op	Op
3 09 50.99	Other characteristics	81	Op	Op	Op	Op
3 09 60.	Pupils outside the normal range of ability and performance	82				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
3	**PROGRAM OF STUDIES—Continued**					
3 09 60.10	Gifted and talented	82	Rec	Rec	Rec	Rec
3 09 60.11	In general academic work	82	Op	Op	Op	Op
3 09 60.12	In fine arts areas	82	Op	Op	Op	Op
3 09 60.13	In vocational and technical areas	82	Op	Op	Op	Op
3 09 60.19	In other areas	82	Op	Op	Op	Op
3 09 60.30	Mentally retarded	82				
3 09 60.31	Educable mentally retarded	82	Rec	Rec	----------	Op
3 09 60.32	Trainable mentally retarded	82	Rec	Rec	----------	----------
3 09 60.33	Severely mentally retarded	82	Rec	----------	----------	----------
3 09 60.40	Physically handicapped	82				
3 09 60.41	Blind	82	Rec	Rec	Rec	Rec
3 09 60.42	Partially seeing	82	Rec	Rec	Rec	Rec
3 09 60.43	Deaf	82	Rec	Rec	Rec	Rec
3 09 60.44	Hard of hearing	82	Rec	Rec	Rec	Rec
3 09 60.45	Speech impaired	82	Rec	Rec	Rec	Rec
3 09 60.46	Crippled	82	Rec	Rec	Rec	Rec
3 09 60.47	Pupils with special physical health problems	82	Rec	Rec	Rec	Rec
3 09 60.50	Socially and/or emotionally handicapped	82				
3 09 60.51	Emotionally disturbed	82	Rec	Rec	----------	----------
3 09 60.52	Delinquency prone	82	Rec	Rec	----------	----------
3 09 60.59	Other social and/or emotional handicaps	82	Rec	Rec	----------	----------
3 09 60.60	Pupils with learning disabilities	82	Rec	Rec	----------	----------
3 09 60.90	Other groups of pupils outside the normal range of ability and performance	83				
3 09 60.91	Multiple handicapped	83	Rec	Rec	Op	Op
3 09 60.99	Other characteristics	83	Op	Op	Op	Op
3 10 00.	ENTRANCE INTO PROGRAM OF STUDIES	83				
3 10 10.	Requirements for entrance into program of studies	83				
3 10 10.02	Course or courses previously completed	83	----------	Op	Op	Op
3 10 10.04	Achievement in schoolwork	83	----------	Op	Op	Op
3 10 10.07	Current employment	83	----------	----------	----------	Op
3 10 10.08	Employability	83	----------	Op	----------	Op
3 10 10.09	Grade or year standing	83	----------	Op	Op	----------
3 10 10.10	No requirement	83	----------	Op	Op	Op
3 10 10.11	Payment of fee	83	Rec	Rec	Rec	Rec
3 10 10.12	Recommendation of psychologist	83	Rec	Rec	----------	----------
3 10 10.13	Recommendation of teachers, counselor, and/or principal	83	Rec	Rec	Rec	----------
3 10 10.14	Special pupil ability, aptitude, or interest	83	Op	Op	Op	Op
3 10 10.15	Special pupil need	83	Rec	Rec	----------	----------
3 10 10.16	Successful completion of entrance examination or other test	83	----------	Op	Op	Op
3 10 10.99	Other requirements	83	Rec	Rec	Op	Op
3 10 30.	Orientation practices	84	----------	Op	Op	Op
3 12 00.	COMPLETION OF PROGRAM OF STUDIES	84				
3 12 10.	Requirements for successful completion of program of studies	84				
3 12 10.10	Completion of a minimum number of units of value	85	----------	Rec	Rec	----------
3 12 10.11	Total number	85	----------	Op	Op	Op
3 12 10.12	Number in required courses in area of major specialization	85	----------	Op	Op	Op
3 12 10.13	Number in required courses in area of minor specialization	85	----------	Op	Op	Op

Classification of items of information	Definition page No.	Type of instructional program			
		Elementary	Secondary	Junior college	Adult education
3 PROGRAM OF STUDIES—Continued					
3 12 10.14 Number in elective courses	85	----------	Op	Op	Op
3 12 10.15 Noncredit courses required	85	----------	Op	Op	Op
3 12 10.20 General performance or achievement in schoolwork	85	----------	Rec	Rec	Rec
3 12 10.30 Equivalency examination	85	----------	Rec	----------	----------
3 12 10.40 Age	85	Op	Op	----------	----------
3 12 10.50 Duration of time in program	85	Op	Op	----------	----------
3 12 10.90 Other requirement	85	----------	Rec	Rec	----------
3 12 21. Recognition for completion of program of studies	85				
3 12 21.10 High school diploma	85	----------	Rec	----------	----------
3 12 21.20 Certificate of high school equivalency	85	----------	Rec	----------	----------
3 12 21.30 Certificate of completion	85	----------	Rec	----------	Rec
3 12 21.40 Certificate of attendance	85	----------	Rec	----------	Rec
3 12 21.50 Associate degree	85	----------	----------	Rec	----------
3 12 21.60 Other certificate or degree	85	----------	Rec	Rec	Rec
3 12 21.70 Promotion to next school	85	Rec	Rec	Rec	----------
3 12 21.80 No recognition	85	Rec	Rec	----------	Rec
3 12 21.90 Other recognition	85	Rec	Rec	Rec	Rec
3 12 30. Other termination practices	87	Op	Op	----------	----------
3 21 00. SUBJECT MATTER OF PROGRAM OF STUDIES	87				
3 21 40. Specialization	87				
3 21 41. Area(s) of major specialization	88	----------	Op	Rec	Rec
3 21 42. Area(s) of minor specialization	88	----------	Op	Rec	Rec
3 21 43. Type of occupational program of studies	88				
3 21 43.10 Occupational training program	88	----------	Rec	Rec	Rec
3 21 43.20 Occupational retraining program	88				
3 21 43.21 Upgrading in current occupation	88	----------	----------	----------	Rec
3 21 43.22 Retraining for new occupation	88	----------	----------	----------	Rec
3 21 43.30 Vocational program	88	----------	Rec	Rec	Rec
3 21 43.40 Technical program	88	----------	----------	Rec	Rec
3 21 43.50 Apprenticeship program	88	----------	Rec	----------	Rec
3 21 43.90 Other occupational program	88	----------	Rec	Rec	Rec
3 21 44. Occupational goal of pupils	88	----------	Rec	----------	Rec
3 21 50. Courses offered in program of studies	88	----------	Rec	Op	Op
3 21 51. Required courses	88	----------	Op	Op	Op
3 21 52. Elective courses	88	----------	Op	Op	Op
3 23 00. PLANNED INSTRUCTIONAL OUTCOMES FOR PUPILS	89	Op	Op	Op	Op
3 34 00. LOCATION OF INSTRUCTION	96	----------	Op	Op	Op
3 36 00. INSTRUCTIONAL EQUIPMENT AND SUPPLIES FOR PROGRAM OF STUDIES	99	Op	Op	Op	Op
3 41 00. STRUCTURE OF PROGRAM OF STUDIES	100				
3 41 10.10 Separate subjects: discrete courses or subject-matter areas	100	Op	Op	----------	----------
3 41 10.20 Separate subjects: correlated courses or subject-matter areas	100	Op	Op	----------	----------
3 41 10.30 Broad fields	100	Op	Op	----------	----------
3 41 10.40 Integrated	100	Op	Op	----------	----------
3 41 10.50 Core units	100	Op	Op	----------	----------
3 41 10.80 Combination	100	Op	Op	----------	----------
3 41 10.90 Other structure	101	Op	Op	Op	Op
3 54 30. INSTRUCTIONAL SERVICES RELATED TO PROGRAM OF STUDIES (SUMMARY INFORMATION)	104	Op	Op	Op	Op

Classification of items of information	Definition page No.	Type of instructional program			
		Elementary	Secondary	Junior college	Adult education
3 PROGRAM OF STUDIES Continued					
3 55 30. PUPIL MEMBERSHIP IN COURSES AND COCURRICULAR ACTIVITIES OF PROGRAM OF STUDIES (SUMMARY INFORMATION)	104	Op	Op	Op	Op
3 56 30. INSTRUCTIONAL STAFF MEMBERS FOR PROGRAM OF STUDIES (SUMMARY INFORMATION)	104	Op	Op	Op	Op
3 57 00. COURSES (SUMMARY INFORMATION)	104				
3 57 31. Courses in program of studies	105	----------	Rec	Op	Op
3 57 32 Courses offered by department	105	----------	Op	Op	Op
3 58 30. COCURRICULAR ACTIVITIES RELATED TO PROGRAM OF STUDIES (SUMMARY INFORMATION)	105	Op	Op	Op	Op
3 99 00. OTHER INFORMATION ABOUT PROGRAM OF STUDIES	105	Op	Op	Op	Op

ITEMS DESCRIBING A SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY

40000 Series

Items of information included in the 40000 Series may be used to describe aspects of each type of self-contained class, course, or cocurricular activity, e.g., all the fifth-grade classes of a school, all the freshman English classes, and all the class organizations. This includes items for describing content, aspects of administrative arrangements, time elements, approval, type of pupils served, instruction, and recognition for completion.

A self-contained class is a class having the same teacher (or team of teachers) for all or most of the daily school session. A type of self-contained class in a given school may comprise two or more sections, e.g., three sections of the fourth grade.

A course is an organization of subject matter and related learning experiences provided for the instruction of pupils on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester, regular school term, and a 2-week workshop). A course may comprise two or more sections, e.g., four sections of a freshman English course. Credit toward graduation or completion of a program of studies generally is given pupils for the successful completion of a course.

A cocurricular activity is an aspect of the total curriculum, under the direction of the school but generally not provided in typical classes, for which participation generally is not required and credit generally is not given. Such activities often include camp experiences, student organizations, intramural and interscholastic athletics, entertainments, assembly programs, publications, clubs, band, orchestra, pupil participation in school government, and service activities. When these activities are managed by pupils under the guidance or supervision of staff members they generally are referred to as student body activities. Activities in which participation is required or for which units of value are given usually are considered to be courses. In some situations, a given activity (e.g., orchestra) may serve as a cocurricular (noncredit) activity for many participants and as a course for others. (See also p. 242.)

Items of information used in describing the program of studies of which a class or course may be a part are included in the 30000 Series. Items used for scheduling are included in the 50000 Series. Some items of information which may be used in the evaluation of a self-contained class, course, or cocurricular activity are included in chapter 4 under item X0700, Evaluation and Curriculum Improvement and, more specifically, under item X0754.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4 01 00.	SPECIFICATIONS FOR SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY	59	Op	Op	Op	Op
4 02 00.	IDENTIFICATION OF SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY	59				
4 02 12.	Standard descriptive title	59	Rec	Rec	Rec	Rec
4 02 13.	Local descriptive title	59	Rec	Rec	Rec	Rec
4 02 21.	Standard number or code	59	Rec	Rec	Rec	Rec
4 02 22.	Local number or code	59	Rec	Rec	Rec	Rec
4 02 45.	Type of class organizational arrangement	62				
4 02 45.10	Self-contained class	62	Rec	Rec	Rec	Rec
4 02 45.20	Course	62	Rec	Rec	Rec	Rec
4 02 45.21	Vocational course	62	----------	Rec	Rec	Rec
4 02 45.22	Advanced placement course	62	----------	Rec	----------	----------
4 02 45.23	General continuation class	62	----------	----------	----------	Op
4 02 45.29	Other course	62	Op	Op	Op	Op
4 02 45.30	Cocurricular activity	62	Op	Rec	Rec	Op
4 02 70.	Contract for instruction or service	63	Rec	Rec	Rec	Rec
4 03 00.	PLACEMENT OF CLASS, COURSE, OR ACTIVITY	63				
4 03 22.	Grade placement	64	Rec	Rec	Rec	Rec
4 03 32.	Year placement	65	Rec	Rec	----------	----------
4 03 51.	Number of courses or classes in sequence	65				
4 03 51.01	1 course or class	65	Op	Op	Op	Op
4 03 51.02	2 courses or classes	65	Op	Op	Op	Op
4 03 51.03	3 courses or classes	65	Op	Op	Op	Op
4 03 51.04	4 courses or classes	65	Op	Op	Op	Op
4 03 51.05	5 courses or classes	65	Op	Op	Op	Op
4 03 51.06	6 courses or classes	65	Op	Op	Op	Op
4 03 51.07	7 courses or classes	65	Op	Op	Op	Op
4 03 51.08	8 courses or classes	65	Op	Op	Op	Op
4 03 51.09	Other number of courses or classes	65	Op	Op	Op	Op
4 03 52.	Position of course or class in sequence	65				
4 03 52.01	1st course or class	65	Op	Op	Op	Op
4 03 52.02	2d course or class	65	Op	Op	Op	Op
4 03 52.03	3d course or class	65	Op	Op	Op	Op
4 03 52.04	4th course or class	65	Op	Op	Op	Op
4 03 52.05	5th course or class	65	Op	Op	Op	Op
4 03 52.06	6th course or class	65	Op	Op	Op	Op
4 03 52.07	7th course or class	65	Op	Op	Op	Op
4 03 52.08	8th course or class	65	Op	Op	Op	Op
4 03 52.09	Other position	65	Op	Op	Op	Op
4 04 00.	LEVEL OF DIFFICULTY OR ABILITY	65				
4 04 10.	Level of difficulty	65				
4 04 10.10	Average difficulty	65	Rec	Rec	----------	----------
4 04 10.20	Above-average difficulty	65	Rec	Rec	----------	----------
4 04 10.30	Below-average difficulty	65	Rec	Rec	----------	----------
4 04 10.40	For mentally retarded	65	Rec	Rec	----------	----------
4 04 10.80	Not applicable	65	Rec	Rec	----------	----------
4 04 20.	Level of ability required	65				
4 04 20.10	Average ability	65	----------	Op	----------	----------
4 04 20.20	Above-average ability	65	----------	Op	----------	----------
4 04 20.30	Below-average ability	65	----------	Op	----------	----------
4 04 20.80	Not applicable	65	----------	Op	----------	----------
4 05 00.	APPROVAL OF COURSE	65				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4	SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 05 10.	Approval status	66	----------	Rec	Rec	Rec
4 05 20.	Approving agency	66	----------	Rec	Rec	Rec
4 06 00.	TIME SCHEDULE	66				
4 06 65.	Minutes in class period	69	----------	Rec	Rec	Op
4 06 78.	Usual number of modules per day for unit of value	69	----------	Rec	----------	----------
4 06 81.	Year and term	70	Rec	Rec	Rec	Rec
4 06 83.	Days of week	70	----------	Rec	Rec	Rec
4 06 84.	Number of days per week	70				
4 06 84.01	1 day	70	----------	Op	Op	Op
4 06 84.02	2 days	70	----------	Op	Op	Op
4 06 84.03	3 days	70	----------	Op	Op	Op
4 06 84.04	4 days	70	----------	Op	Op	Op
4 06 84.05	5 days	70	----------	Op	Op	Op
4 06 84.06	6 days	70	----------	Op	Op	Op
4 06 84.07	7 days	70	----------	Op	Op	Op
4 06 84.08	Variable number of days	70	----------	Op	Op	Op
4 06 85.	Time of day	70	Op	Op	Op	Op
4 06 86.	Time segment for class or course	70				
4 06 86.11	Entire session	70	Op	----------	----------	Op
4 06 86.12	Block of time	70	----------	Op	----------	----------
4 06 86.13	Single class period	70	----------	Op	----------	----------
4 06 86.14	Modules of time	70	----------	Op	----------	----------
4 06 86.15	Variable amounts of time	70	----------	Op	----------	----------
4 06 86.19	Other amount of time	70	----------	Op	----------	----------
4 06 87.	Minutes per week	70				
4 06 88.	Number of weeks	70				
4 06 88.01	Under 5 weeks	70	Op	Op	Op	Op
4 06 88.02	5 to 8 weeks	70	Op	Op	Op	Op
4 06 88.03	9 to 12 weeks	70	Op	Op	Op	Op
4 06 88.04	13 to 20 weeks	70	Op	Op	Op	Op
4 06 88.05	21 to 32 weeks	70	Op	Op	Op	Op
4 06 88.06	33 to 36 weeks	70	Op	Op	Op	Op
4 06 88.07	37 to 40 weeks	70	Op	Op	Op	Op
4 06 88.08	41 to 44 weeks	70	Op	Op	Op	Op
4 06 88.09	45 to 52 weeks	70	Op	Op	Op	Op
4 06 89.	Miscellaneous times for class meetings	70	Op	Op	Op	Op
4 06 90.	Other time elements	71	Op	Op	Op	Op
4 07 00.	EVALUATION AND CURRICULUM IMPROVEMENT	71				
4 07 10.	Background of the instructional program	71	Op	Op	Op	Op
4 07 20.	Organization for evaluation and/or curriculum improvement	73	Op	Op	Op	Op
4 07 30.	Persons or groups involved in evaluation and/or curriculum improvement	73	Op	Op	Op	Op
4 07 40.	Evaluation procedures	74	Op	Op	Op	Op
4 07 54.	Factors evaluated	76	Op	Op	Op	Op
4 07 54.10	Characteristics of staff	77	Op	Op	Op	Op
4 07 54.20	Instructional content	77	Op	Op	Op	Op
4 07 54.30	Resource utilization	77	Op	Op	Op	Op
4 07 54.40	Instructional processes	77	Op	Op	Op	Op
4 07 54.90	Other factors	77	Op	Op	Op	Op
4 07 90.	Other aspects of evaluation and curriculum improvement	78	Op	Op	Op	Op
4 08 00.	EVALUATING AND REPORTING PUPIL PROGRESS	78				
4 08 10.	Unit of value	78				

Classification of items of information	Definition page No.	Type of instructional program			
		Elementary	Secondary	Junior college	Adult education
4 SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 08 11. Terminology used for unit of value	78	----------	Op	Op	Op
4 08 12. Class periods or modules per week per unit of value	78	----------	Rec	Rec	Op
4 08 13. Minutes per week per unit of value	79	----------	Rec	Rec	----------
4 08 15. Variations in units of value	79	----------	Op	----------	----------
4 08 20. Credit or noncredit	79				
4 08 20.10 Credit awarded	79	----------	Op	Op	----------
4 08 20.20 Credit not awarded	79	----------	Op	Op	----------
4 08 30. Marking scale	79	Op	Op	Op	Op
4 08 40. Mark value for course	79	----------	Op	----------	----------
4 08 60. Means of reporting	80	Op	Op	----------	----------
4 09 00. PUPILS SERVED	80				
4 09 15. Number of pupils	80	Op	Op	Op	Op
4 09 20. Basis for selection or grouping	80	Rec	Rec	Rec	Rec
4 09 40. Pupil background	81	Op	Op	Op	Op
4 09 50. Pupils within the normal range of ability and performance	81	Op	Op	Op	Op
4 09 60. Pupils outside the normal range of ability and performance	82	Rec	Rec	Rec	Rec
4 09 70. Intraschool and/or interschool activity	83				
4 09 70.10 Intraschool activity	83	----------	Op	Op	----------
4 09 70.20 Interschool activity	83	----------	Op	Op	----------
4 10 00. ENTRANCE INTO SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY	83				
4 10 10. Requirements for entrance	83				
4 10 10.02 Course or courses previously completed	83	----------	Op	Op	Op
4 10 10.03 Enrollment in given program of studies	83	----------	Op	Op	Op
4 10 10.04 Achievement in schoolwork	83	----------	Op	Op	Op
4 10 10.05 Age	83	Op	Op	Op	Op
4 10 10.07 Current employment	83	----------	----------	----------	Op
4 10 10.09 Grade or year standing	83	----------	Op	Op	----------
4 10 10.10 No requirement	83	----------	Op	Op	Op
4 10 10.11 Payment of fee	83	Rec	Rec	Rec	Rec
4 10 10.12 Recommendation of psychologist	83	Rec	Rec	----------	----------
4 10 10.13 Recommendation of teachers, counselor, and/or principal	83	----------	Rec	Rec	----------
4 10 10.14 Special pupil ability, aptitude, or interest	83	Op	Op	Op	Op
4 10 10.15 Special pupil need	83	Rec	Rec	----------	----------
4 10 10.16 Successful completion of entrance examination or other test	83	----------	Op	Op	Op
4 10 10.99 Other requirements and procedures	83	Rec	Rec	Op	Op
4 10 20. Required or elective	83				
4 10 20.10 Required for all pupils	83	----------	Op	Op	----------
4 10 20.20 Required for pupils in specified programs of studies	83	----------	Op	Op	Op
4 10 20.31 College preparatory program	83	----------	Op	----------	----------
4 10 20.41 General education program	83	----------	Op	----------	----------
4 10 20.42 Occupational program	83	----------	Op	----------	Op
4 10 20.51 Transfer program	83	----------	----------	Op	----------
4 10 20.59 Other program of studies	84	----------	Op	Op	Op
4 10 20.60 Required for all pupils in area of specialization within program	84	----------	Op	Op	Op
4 10 20.70 Elective for all pupils	84	----------	Op	Op	----------
4 10 20.80 Elective for pupils in specified programs of studies	84	----------	Op	Op	Op
4 12 00. COMPLETION OF SELF-CONTAINED CLASS OR COURSE	84				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4	SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 12 10.	Requirements for successful completion of self-contained class or course	84				
4 12 10.20	General performance or achievement in schoolwork	85	Op	Op	Op	---
4 12 10.30	Equivalency examination	85	---	Op	---	---
4 12 10.50	Duration of time in course or class	85	Op	Op	---	---
4 12 10.90	Other requirements	85	Op	Op	Op	---
4 12 22.	Recognition for completion of self-contained class, course, or cocurricular activity	85	---	Rec	Rec	Rec
4 12 22.01	Awarding of units of value	85	---	Rec	Rec	Rec
4 12 22.02	Completion of requirement, but no units of value awarded	86	---	Rec	Rec	Rec
4 12 22.03	Certificate	86	---	Rec	Rec	Rec
4 12 22.04	Honor award	86	---	Rec	Rec	Rec
4 12 22.05	Letter of commendation	86	---	Op	---	---
4 12 22.06	Monogram	86	---	Op	Op	---
4 12 22.07	Points	86	---	Op	Op	---
4 12 22.08	Promotion or advancement	86	Rec	Rec	Rec	Rec
4 12 22.88	No special recognition	86	---	Rec	Rec	Rec
4 12 22.99	Other recognition	86	---	Op	Op	Op
4 21 00.	SUBJECT MATTER	87				
4 21 10.	Subject matter for self-contained class	87				
4 21 11.	Content for all schoolwork	87	Rec	---	---	Rec
4 21 12.	Content for portions of schoolwork within self-contained class	87	Op	---	---	Op
4 21 13.	Content for portion outside self-contained class	87	Op	---	---	Op
4 21 20.	Subject matter for course	87				
4 21 21.	Content for entire course	87	---	Rec	Rec	Rec
4 21 22.	Content for portions of course	87	---	Op	Op	Op
4 21 24.	Major resource or plan	87	---	Rec	Rec	Rec
4 21 30.	Content of cocurricular activity	87				
4 21 31.	Content of entire activity	87	---	Rec	Rec	Rec
4 21 32.	Content for portions of activity	87	---	Op	Op	Op
4 21 34.	Major resource or plan	87	---	Op	Op	Op
4 22 00.	TREATMENT OF CONTENT	88				
4 22 00.01	Introduction to area	88	---	Op	Op	Op
4 22 00.02	Introduction to research methods in area	88	---	Op	Op	Op
4 22 00.03	Practice, application, or content enrichment	88	Op	Op	Op	Op
4 22 00.04	Study in depth	88	---	Op	Op	Op
4 22 00.05	Survey of area	88	---	Op	Op	Op
4 22 00.99	Other treatment	88	---	Op	Op	Op
4 23 00.	PLANNED INSTRUCTIONAL OUTCOMES FOR PUPILS	89				
4 23 00.01	Acculturation	89	Op	Op	Op	Op
4 23 00.02	Appreciations and attitudes	89	Op	Op	Op	Op
4 23 00.03	Appropriate behavior	89	Op	Op	Op	Op
4 23 00.04	Career guidance	89	---	Op	Op	Op
4 23 00.05	Citizenship knowledge and understanding	89	Op	Op	Op	Op
4 23 00.06	Cognitive thinking	89	Op	Op	Op	Op
4 23 00.07	Creativity	89	Op	Op	Op	Op
4 23 00.08	Critical judgment	89	Op	Op	Op	Op
4 23 00.09	Education for leisure	89	Op	Op	Op	Op
4 23 00.10	Experience in service to others	89	Op	Op	Op	Op
4 23 00.11	General development in area	89	Op	Op	Op	Op
4 23 00.12	Historical awareness and/or background	89	Op	Op	Op	Op
4 23 00.13	Knowledge and understanding in area	89	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4	SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 23 00.14	Leadership ability	89	Op	Op	Op	Op
4 23 00.15	Literacy	89	----	----	----	Op
4 23 00.16	Mental health	89	Op	Op	Op	Op
4 23 00.17	Moral and ethical values	89	Op	Op	Op	Op
4 23 00.18	Occupational competence, initial	89	----	Op	Op	Op
4 23 00.19	Occupational competence, upgraded or updated	89	----	----	----	Op
4 23 00.20	Personal satisfaction	89	Op	Op	Op	Op
4 23 00.21	Physical fitness and health	89	Op	Op	Op	Op
4 23 00.22	Readiness	89	Op	Op	Op	Op
4 23 00.23	Rehabilitation	89	Op	Op	----	Op
4 23 00.24	Remediation	89	Op	Op	Op	Op
4 23 00.25	Safety consciousness	90	Op	Op	Op	Op
4 23 00.26	Self-understanding	90	Op	Op	Op	Op
4 23 00.27	Skills associated with area	90	Op	Op	Op	Op
4 23 00.28	Skills of inquiry	90	Op	Op	Op	Op
4 23 00.29	Social adeptness	90	Op	Op	Op	Op
4 23 00.30	Socialization	90	Op	Op	Op	Op
4 23 00.31	Understanding of basic principles	90	Op	Op	Op	Op
4 23 00.99	Other planned outcomes	90	Op	Op	Op	Op
4 31 00.	STAFF MEMBERS	90				
4 31 10.	Teachers or other staff members assigned	90	Rec	Rec	Rec	Rec
4 31 22.	Teacher for portions of schoolwork of self-contained class	90	Op	----	----	----
4 31 22.10	Teacher of self-contained class	90	Op	----	----	----
4 31 22.20	Specialist	90	Op	----	----	----
4 31 22.30	Both	90	Op	----	----	----
4 31 22.50	Other teacher	90	Op	----	----	----
4 31 90.	Other information about staff members	90	Op	Op	Op	Op
4 34 00.	LOCATION OF INSTRUCTION	96	Op	Op	Op	Op
4 35 20.	INSTRUCTIONAL SPACE FOR SELF-CONTAINED CLASS, COURSE, OR CURRICULAR ACTIVITY	97				
4 35 20.10	Regular instructional spaces	97	Op	Op	Op	Op
4 35 20.11	Regular classroom (permanent walls)	97	Op	Op	Op	Op
4 35 20.12	Regular classroom (movable partitions)	97	Op	Op	Op	Op
4 35 20.13	Large group instructional space	97	Op	Op	Op	Op
4 35 20.14	Small group instructional space	97	Op	Op	Op	Op
4 35 20.20	Special instructional spaces	97	Op	Op	Op	Op
4 35 20.21	Kindergarten room	97	Op	----	----	----
4 35 20.22	Laboratory room	97	Op	Op	Op	Op
4 35 20.23	Shop room	98	Op	Op	Op	Op
4 35 20.24	Home economics room	98	Op	Op	Op	Op
4 35 20.25	Music room	98	Op	Op	Op	Op
4 35 20.26	Special instructional space for exceptional children	98	Op	Op	----	Op
4 35 20.29	Other special instructional space	98	Op	Op	Op	Op
4 35 20.30	Other instructional spaces	98	Op	Op	Op	Op
4 35 20.31	School library	98	Op	Op	Op	Op
4 35 20.32	Study hall	98	Op	Op	Op	Op
4 35 20.33	Audiovisual room	98	Op	Op	Op	Op
4 35 20.34	Auditorium	98	Op	Op	Op	Op
4 35 20.35	Gymnasium	98	Op	Op	Op	Op
4 35 20.36	Gymnatorium	98	Op	Op	Op	Op
4 35 20.37	Cafetorium	98	Op	Op	Op	Op
4 35 20.38	Multipurpose room	98	Op	Op	Op	Op
4 35 20.41	Study carrel	99	Op	Op	Op	Op
4 35 20.89	Miscellaneous indoor instructional space	99	Op	Op	Op	Op
4 35 20.99	Miscellaneous outdoor instructional space	99	Op	Op	Op	Op

Classification of items of information	Definition page No.	Type of instructional program			
		Elementary	Secondary	Junior college	Adult education
4 SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 36 00. INSTRUCTIONAL EQUIPMENT AND SUPPLIES	99				
4 36 10. Reading materials	99				
4 36 10.10 Books	99	Op	Op	Op	Op
4 36 10.20 Microforms	99	Op	Op	Op	Op
4 36 10.31 Newspapers	99	Op	Op	Op	Op
4 36 10.32 Pamphlets and documents	99	Op	Op	Op	Op
4 36 10.40 Periodicals	99	Op	Op	Op	Op
4 36 10.50 Reference books	99	Op	Op	Op	Op
4 36 10.60 Study guides	99	Op	Op	Op	Op
4 36 10.70 Textbooks	99	Op	Op	Op	Op
4 36 10.81 Workbooks	99	Op	Op	Op	Op
4 36 10.82 Written programmed materials	99	Op	Op	Op	Op
4 36 10.90 Other reading materials	99	Op	Op	Op	Op
4 36 20. Visual equipment and supplies	99				
4 36 20.10 Cameras	99	Op	Op	Op	Op
4 36 20.21 Chalkboards	99	Op	Op	Op	Op
4 36 20.22 Display boards and display cases	99	Op	Op	Op	Op
4 36 20.31 Filmstrips and/or slides	99	Op	Op	Op	Op
4 36 20.41 Globes	99	Op	Op	Op	Op
4 36 20.42 Maps, graphs, and/or charts	99	Op	Op	Op	Op
4 36 20.50 Motion pictures (silent)	99	Op	Op	Op	Op
4 36 20.61 Opaque projectors	99	Op	Op	Op	Op
4 36 20.62 Overhead projectors	99	Op	Op	Op	Op
4 36 20.70 Picture sets and study prints	99	Op	Op	Op	Op
4 36 20.81 Projection screens	99	Op	Op	Op	Op
4 36 20.82 Readers and reader-printers for microforms	99	Op	Op	Op	Op
4 36 20.83 Transparency maker	99	Op	Op	Op	Op
4 36 20.90 Other visual equipment and supplies	99	Op	Op	Op	Op
4 36 30. Audio equipment and supplies	99	Op	Op	Op	Op
4 36 30.10 Closed circuit audio equipment	99	Op	Op	Op	Op
4 36 30.20 Dictating machines	99	Op	Op	Op	Op
4 36 30.30 Radios	99	Op	Op	Op	Op
4 36 30.40 Record players	99	Op	Op	Op	Op
4 36 30.50 Tape recorders	99	Op	Op	Op	Op
4 36 30.60 Telelecture equipment	100	Op	Op	Op	Op
4 36 30.90 Other audio equipment and supplies	100	Op	Op	Op	Op
4 36 40. Audiovisual equipment and supplies	100				
4 36 40.10 Closed circuit audio and visual equipment	100	Op	Op	Op	Op
4 36 40.20 Filmstrips or slides with sound	100	Op	Op	Op	Op
4 36 40.30 Motion pictures (sound)	100	Op	Op	Op	Op
4 36 40.40 Television cameras	100	Op	Op	Op	Op
4 36 40.50 Television receiving sets	100	Op	Op	Op	Op
4 36 40.60 Video tape recorder	100	Op	Op	Op	Op
4 36 40.90 Other audiovisual equipment	100	Op	Op	Op	Op
4 36 50. Three-dimensional and manipulative equipment and supplies	100	Op	Op	Op	Op
4 36 60. Equipment and supplies for specific type of activity	100	Op	Op	Op	Op
4 36 60.10 Art equipment and supplies	100	Op	Op	Op	Op
4 36 60.20 Business equipment and supplies	100	Op	Op	Op	Op
4 36 60.30 Driver education equipment and supplies	100	Op	Op	Op	Op
4 36 60.40 Homemaking equipment and supplies	100	Op	Op	Op	Op
4 36 60.50 Industrial equipment and supplies	100	Op	Op	Op	Op
4 36 60.60 Music equipment and supplies	100	Op	Op	Op	Op
4 36 60.70 Physical education equipment and supplies	100	Op	Op	Op	Op
4 36 60.80 Scientific laboratory equipment and supplies	100	Op	Op	Op	Op
4 36 60.90 Equipment and supplies for other specific type of activity	100	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4	SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 36 70.	Furniture and furnishings	100	Op	Op	Op	Op
4 36 90.	Other instructional equipment and supplies	100	Op	Op	Op	Op
4 41 00.	STRUCTURE OF COURSE	100				
4 41 10.10	Separate subjects: discrete course	100	--------	Op	--------	Op
4 41 10.20	Separate subjects: correlated course	100	--------	Op	--------	Op
4 41 10.30	Broad fields	100	--------	Op	--------	--------
4 41 10.50	Core units	100	--------	Op	--------	--------
4 41 10.90	Other structure	101	--------	Op	Op	Op
4 42 00.	PRINCIPAL MEDIUM OF INSTRUCTION (OR DIRECTION)	101				
4 42 10.	Direct pupil-teacher interaction	101				
4 42 11.	In-school instruction	101				
4 42 11.10	Single teacher	101	Op	Op	Op	Op
4 42 11.20	Team of teachers	101	Op	Op	Op	Op
4 42 11.30	Tutoring	101	Op	Op	Op	Op
4 42 11.40	Independent study	101	Op	Op	Op	Op
4 42 11.90	Other	101	Op	Op	Op	Op
4 42 12.	Out-of-school instruction	101				
4 42 12.10	On-the-job supervision	101	--------	Op	Op	Op
4 42 12.20	Home and/or hospital instruction	101	Op	Op	Op	Op
4 42 12.90	Other	101	Op	Op	Op	Op
4 42 20.	Indirect pupil-teacher interaction	101				
4 42 20.10	Television	101	Op	Op	Op	Op
4 42 20.20	Correspondence	101	--------	Op	Op	Op
4 42 20.30	Radio	101	Op	Op	--------	Op
4 42 20.40	Telephone	101	Op	Op	--------	Op
4 42 20.50	Self-teaching materials (programmed instruction)	101	Op	Op	Op	Op
4 42 20.60	Recordings	101	Op	Op	--------	Op
4 42 20.90	Other	101	Op	Op	Op	Op
4 43 00.	PRINCIPAL METHODS OF INSTRUCTION (OR DIRECTION)	101				
4 43 00.01	Comparative analysis	101	Op	Op	Op	Op
4 43 00.02	Demonstration	101	Op	Op	Op	Op
4 43 00.03	Diagnosis	101	Op	Op	Op	Op
4 43 00.04	Directed observation	101	Op	Op	Op	Op
4 43 00.05	Discussion	101	Op	Op	Op	Op
4 43 00.06	Dramatization	101	Op	Op	Op	Op
4 43 00.07	Drill	102	Op	Op	Op	Op
4 43 00.08	Experimentation	102	Op	Op	Op	Op
4 43 00.09	Field experience	102	Op	Op	Op	Op
4 43 00.10	Field trip	102	Op	Op	Op	Op
4 43 00.11	Group work	102	Op	Op	Op	Op
4 43 00.12	Laboratory experience	102	Op	Op	Op	Op
4 43 00.13	Lecture	102	Op	Op	Op	Op
4 43 00.14	Listening	102	Op	Op	Op	Op
4 43 00.15	Manipulative and tactile activity	102	Op	Op	Op	Op
4 43 00.16	Modeling and imitation	102	Op	Op	Op	Op
4 43 00.17	Practice	102	Op	Op	Op	Op
4 43 00.18	Problem solving	102	Op	Op	Op	Op
4 43 00.19	Programmed instruction	102	Op	Op	Op	Op
4 43 00.20	Project	102	Op	Op	Op	Op
4 43 00.21	Reading	102	Op	Op	Op	Op
4 43 00.22	Recitation	102	Op	Op	Op	Op
4 43 00.23	Seminar	102	Op	Op	Op	Op
4 43 00.24	Shopwork	102	Op	Op	Op	Op
4 43 00.25	Simulation	102	Op	Op	Op	Op
4 43 00.26	Testing	102	Op	Op	Op	Op
4 43 00.99	Other methods of instruction	102	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior college	Adult education
4	SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY—Continued					
4 44 00.	OTHER PROCEDURES FOR INSTRUCTION (OR DIRECTION)	102				
4 44 10.	Size of group for instruction	102				
4 44 10.10	Large group	102	Op	Op	Op	----------
4 44 10.20	Small group	102	Op	Op	Op	----------
4 44 10.30	Individual instruction	103	Op	Op	Op	----------
4 44 20.	Basis for grouping practices	103				
4 44 20.10	Abilities	103	Op	Op	----------	----------
4 44 20.20	Achievement	103	Op	Op	----------	----------
4 44 20.30	Age	103	Op	Op	----------	----------
4 44 20.40	Interests	103	Op	Op	----------	----------
4 44 20.50	Personality characteristics	103	Op	Op	----------	----------
4 44 20.60	Physical development	103	Op	Op	----------	----------
4 44 20.70	Sex	103	Op	Op	----------	----------
4 44 20.90	Other basis	103	Op	Op	----------	----------
4 44 30.	Pupil participation in planning	103	Op	Op	----------	----------
4 44 40.	Provisions for individualization of instruction	103	Op	Op	----------	----------
4 44 50.	Use of pupil leadership	103	Op	Op	----------	----------
4 44 60.	Evaluation procedures	103				
4 44 60.10	Observation	103	Op	Op	----------	----------
4 44 60.20	Teacher-made tests	103	Op	Op	----------	----------
4 44 60.30	Standardized achievement tests	103	Op	Op	----------	----------
4 44 60.40	Inventories	103	Op	Op	----------	----------
4 44 60.50	Pupil self-evaluation	103	Op	Op	----------	----------
4 44 60.90	Other evaluation procedure	103	Op	Op	----------	----------
4 44 90.	Other teaching procedures	103	Op	Op	----------	----------
4 55 40.	PUPIL MEMBERSHIP IN SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (SUMMARY INFORMATION)	104	Op	Op	Op	Op
4 56 40.	STAFF MEMBERS FOR SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (SUMMARY INFORMATION)	104	Op	Op	Op	Op
4 59 00.	INFORMATION ABOUT SECTIONS OF SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (SUMMARY INFORMATION)	105	Op	Op	Op	Op
4 99 00.	OTHER INFORMATION ABOUT A SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY	105	Op	Op	Op	Op

ITEMS DESCRIBING A SECTION OR INSTRUCTIONAL SERVICE ACTIVITY

50000 Series

A class (or a *section* of a course, self-contained class, or cocurricular activity) is a group of pupils assigned to one or more teachers or other staff members for a given period of time for instruction or other activity in a situation where the teacher(s) and the pupils are in the presence of each other. This instruction or activity may be in subject matter of very broad scope as in a self-contained class in the elementary school, in subject matter of very narrow scope as in certain college-level courses, or in cocurricular activity areas of varying scope. A course or cocurricular activity may comprise a single section or it may comprise several sections, as in a Freshman English course having several classes frequently referred to as "sections;" similarly, a specific type of self-contained class may comprise a single section or it may comprise several sections as in a school having several sections of the fourth grade. Items of information about the type of self-contained class, course, or cocurricular activity of which a specific section is a part are included under the 40000 Series.

An instructional service is an activity which has as its purpose teaching, aiding teaching, improving the quality of teaching, or directing and managing an aspect of instruction. Among services supporting instruction are resource services for pupils, pupil personnel services, services for the instructional staff, and community services. Items of information about the services provided by a school system or school are included under items 13200 and 23200 of this chapter and under item X3200 of chapter 4.

Categories of information in the 50000 series may be used to identify factors involved in scheduling or describing a specific section or service activity, e.g., class or service identification information, relevant time factors, staff members, pupils, and teaching space or other location. This includes the items that comprise a *master schedule* for a school. This master schedule is the printed document or other record indicating how pupils and teachers have been assigned into instructional spaces at given times for instruction or other activities. A study of this schedule can provide much information about the school since it indicates, among other things, the size and resources of the school, the scope of courses available to pupils, the whereabouts and activities of specific individuals at given times, and even the school's philosophy.

Scheduling for a service activity is similar to scheduling for a section in that staff members are scheduled to be available to provide their service in a facility or space at given times; it differs in that pupils are scheduled as the need arises or as their needs are determined during the school term, rather than on a predetermined regular schedule for the entire term.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
5 01 00.	SPECIFICATIONS FOR SECTION OR INSTRUCTION SERVICE ACTIVITY	58	Op	Op	Op	Op
5 02 00.	IDENTIFICATION OF SECTION OR SERVICE	59				
5 02 12.	Standard descriptive title	59	Rec	Rec	Rec	Rec
5 02 13.	Local descriptive title	59	Rec	Rec	Rec	Rec
5 02 23.	Section number or code	59	Rec	Rec	Rec	Rec
5 02 32.	Room or space number	59	Rec	Rec	Rec	Rec
5 02 70.	Contract for instruction or service	63	Rec	Rec	Rec	Rec
5 03 00.	PLACEMENT	63	Rec	Rec	Rec	Rec
5 03 22.	Grade placement	64	Rec	Rec	Rec	Rec
5 03 32.	Year placement	65	Rec	Rec	---------	---------
5 04 00.	LEVEL OF DIFFICULTY OR ABILITY	65				
5 04 10.	Level of difficulty	65	Rec	Rec	---------	---------
5 04 20.	Level of ability required	65	---------	Op	---------	---------
5 06 00.	TIME SCHEDULE FOR SECTION OR SERVICE	66				
5 06 65.	Minutes in class period	69	---------	Op	Op	Op
5 06 81.	Year and term	70	Rec	Rec	Rec	Rec
5 06 82.	Frequency of service	70				
5 06 82.10	Annually	70	Op	Op	Op	Op
5 06 82.20	Semiannually	70	Op	Op	Op	Op
5 06 82.30	Monthly	70	Op	Op	Op	Op
5 06 82.40	Weekly	70	Op	Op	Op	Op
5 06 82.50	Given days of week	70	Op	Op	Op	Op
5 06 82.60	Daily	70	Op	Op	Op	Op
5 06 82.70	Other schedule	70	Op	Op	Op	Op
5 06 82.80	As required	70	Op	Op	Op	Op
5 06 83.	Days of week	70	---------	Op	Op	Op
5 06 84.	Number of days per week	70	---------	Op	Op	Op
5 06 85.	Hour of day or period number(s) of section meeting or service	70	---------	Rec	Rec	Rec
5 06 86.	Time segment for class or course	70	---------	Op	---------	---------
5 06 87.	Minutes per week	70	Op	Op	Op	Op
5 06 88.	Number of weeks	70	Op	Op	Op	Op
5 06 89.	Miscellaneous times for class meetings	70	Op	Op	Op	Op
5 06 90.	Other time elements	71	Op	Op	Op	Op

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
5	SECTION OR INSTRUCTIONAL SERVICE ACTIVITY—Continued					
5 08 00.	EVALUATING AND REPORTING PUPIL PROGRESS	78				
5 08 40.	Mark value for section	79	----------	Op	----------	----------
5 08 60.	Means of reporting	80	Op	Op	----------	----------
5 09 00.	PUPILS SCHEDULED INTO SECTION OR RECEIVING SERVICE	80				
5 09 15.	Number of pupils	80	Rec	Rec	Rec	Rec
5 09 20.	Basis for selection or grouping	80	Rec	Rec	Rec	Rec
5 09 40.	Pupil background	81	Op	Op	Op	Op
5 09 50.	Pupils within the normal range of ability and performance	81	Op	Op	Op	Op
5 09 60.	Pupils outside the normal range of ability and performance	82	Rec	Rec	Rec	Rec
5 09 80.	Identification of pupils	83				
5 09 81.	Names of pupils	83	Rec	Rec	Rec	Rec
5 09 82.	Pupil numbers	83	Rec	Rec	Rec	Rec
5 10 00.	ENTRANCE INTO SECTION	83	Rec	Rec	Rec	Rec
5 12 00.	COMPLETION PRACTICES	84	Op	Op	Op	Op
5 13 20.	INSTRUCTION OF SECTION	87	Op	Op	Op	Op
5 23 00.	PLANNED INSTRUCTIONAL OUTCOMES FOR PUPILS	89	Op	Op	Op	Op
5 31 10.	TEACHER OR OTHER STAFF MEMBER ASSIGNED TO SECTION OR SERVICE	90	Rec	Rec	Rec	Rec
5 34 00.	LOCATION OF INSTRUCTION (OR SERVICE)	96	Rec	Rec	Rec	Rec
5 34 10.11	Location in given school	97	Rec	Rec	Rec	Rec
5 34 10.12	Location in other school in same school system	97	Rec	Rec	Rec	Rec
5 34 10.13	Located in school in other school system	97	Rec	Rec	Rec	Rec
5 34 10.20	Home of pupil	97	Rec	Rec	Rec	Rec
5 34 10.30	Hospital	97	Rec	Rec	Rec	Rec
5 34 10.40	Business, commercial, or industrial facility	97	Rec	Rec	Rec	Rec
5 34 10.90	Other nonschool location	97	Rec	Rec	Rec	Rec
5 35 20.	INSTRUCTIONAL SPACE FOR SECTION	97	Op	Op	Op	Op
5 36 00.	INSTRUCTIONAL EQUIPMENT AND SUPPLIES	99	Op	Op	Op	Op
5 42 00.	PRINCIPAL MEDIUM OF INSTRUCTION	101	Op	Op	Op	Op
5 43 00.	PRINCIPAL METHODS OF INSTRUCTION	101	Op	Op	Op	Op
5 99 00.	OTHER INFORMATION ABOUT A SECTION OR SERVICE ACTIVITY	105	Op	Op	Op	Op

4

Definitions of Items of Information About Curriculum and Instruction

This chapter contains the definitions of the items of information which are classified in chapter 3.

The organization of this chapter differs from that of chapter 3 in that the items of this chapter are organized on the basis of category of information (for example: identification, time elements, pupils served, subject matter, location of instruction, and medium of instruction) while the items of chapter 3 are organized on the basis of level of organization (i.e., school system; school; program of studies; self-contained class, course, or cocurricular activity; and section or service activity).

The numbering system of this chapter reflects its organization. The first place of the number contains an "X," indicating that this place might be used for one or more levels of organization, especially those indicated by the numbers in parentheses following the category heading.[1] (For example, item X 02 11, Name (1, 2) on page 59 is the basis for item 1 02 11 on page 21, School system name, and item 2 02 11 on page 29, Name of school.) The second and third digits of the numbering system represent the major category of information, and provide the basis for the organization of items in this chapter.[2] These first 3 digits—with the first place containing a number—provide the basis for the organization of items in chapter 3. The digits following represent subdivisions of these categories.

Information about curriculum and instruction is essential for individual schools and school systems throughout the United States and its outlying areas. Those items of information which are basic and are therefore *recommended as needed for operating most schools and local school systems* are identified in this chapter and in chapter 3 by the designation "Rec." Those items of information which are important and may be collected and maintained at the *option of individual schools and school systems* are identified by the designation "Op."[3] Additional items may be collected and maintained by individual schools and school systems at their own option as needed for their own purposes. Where a school system has a need to expand its system of information about curriculum and instruction, the expansion should be done in such a way that any additional items of information are readily classifiable under the headings presented in this handbook.

The type of instructional program for which an item of information should be collected and maintained is indicated in this chapter by a designation placed after each item of information. Such designations, repetitions of similar designations presented in chapter 3, are included in this chapter for the sake of convenience and are as follows:

All—All instructional programs (i.e., the four programs listed below).
Elem—Elementary school instructional program.
Sec—Secondary school instructional program.
JrC—Instructional program for college credit.
AdEd—Adult education instructional program.

SPECIFICATIONS (4, 5)
X 01 00 Series

Specifications (i.e., detailed description of operational requirements and self-imposed standards) may serve as a basis for making schedules and assignments, evaluating current practices, identifying immediate and long-range needs, and planning.

---

[1] (1) = school system; (2) = school; (3) = program of studies; (4) = self-contained class, course, or cocurricular activity; (5) = section, or instructional service activity.

[2] These major categories are outlined on pp. 4 and 10.

[3] The use of the designations "Rec" and "Op" in this handbook is not intended to prescribe practice; it is intended to provide guidance to persons and groups establishing or reviewing their system of information about curriculum and instruction. Assigned on the basis of consensus among representatives of groups participating in the development of this handbook (see p. vii), these designations serve to identify items of information considered most important for the sound operation of schools, and probably reflect to an extent the frequency of use of these items.

X 01 00. SPECIFICATIONS FOR CLASS, COURSE, OR SERVICE ACTIVITY (4, 5)

Items of information may be included under this heading to describe requirements, or "specifications", for self-contained classes, courses, cocurricular activities, and services supporting instruction. (Op–All) For this purpose, items about subject matter may be drawn from chapters 5 and 6 of this handbook and from the X2100 Series in this chapter. Items about instructional media may be drawn from the X4200 Series. Items about prerequisite entrance requirements for pupils may be obtained from the X1000 Series or from Handbook V, *Pupil Accounting for Local and State School Systems.*[4] Items about minimum time requirements may be drawn from the X0600 Series. Items about requirements for facilities (including special instructional spaces), equipment, and supplies may be obtained from the X3500 Series, X3600 Series, or from Handbook III, *Property Accounting for Local and State School Systems.*[5] Items about required qualification of staff members may be drawn from Handbook IV, *Staff Accounting for Local and State School Systems.*[6]

A given section of a self-contained class, course, or cocurricular activity may be described under this heading with additional details about requirements and practices which are unique when contrasted with those of other sections of the same type of self-contained class, course, or cocurricular activity. This may involve considerations such as special or unusual subject matter (see chapters 5 and 6), level of difficulty (the X0400 Series), pupils served (the X0900 Series), time of day (item X0685), length of class periods (item X0665), medium of instruction (the X4200 Series), methods of instruction (the X4300 Series), planned instructional outcomes for pupils (the X2300 Series), requirements for equipment and supplies (the X3600 Series), and qualifications of staff members.

IDENTIFICATION (1, 2, 3, 4, 5)
X 02 00 Series

An organizational unit or reporting unit may be identified by use of items of information under this heading; e.g., name, identification number, location, type, and control.

X 02 10. NAME OR DESCRIPTIVE TITLE (1, 2, 3, 4, 5)

X 02 11. Name (1, 2)
Any official name by which a school system or school is identified. (Rec–All)

X 02 12. Standard Descriptive Title (3, 4, 5)
Any appropriate standardized title for statewide or other use. (Rec–All)

X 02 13. Local Descriptive Title (3, 4, 5)
The descriptive title used within the local school or school system, which needs to be recorded only if different from the standard descriptive title. (Rec–All) For example, a program of studies, self-contained class, course, or cocurricular activity might be identified locally—regardless of any applicable standard descriptive title—as the "college preparatory program," "honors program," "fourth grade," "class for the educable mentally retarded," "English I," "freshman English," "classical literature," "photography club," "yearbook," "varsity basketball team," and "student council."

X 02 20. NUMBER OR CODE (1, 2, 3, 4, 5)

X 02 21. Standard Number or Code (1, 2, 4)
Any appropriate standard number or code for statewide or other use. (Rec–All)

X 02 22. Local Number or Code (2, 3, 4)
The number or code used within the local school or school system, recorded only if different from the standard number or code. (Rec–All)

X 02 23. Section Number or Code (5)
The number or code, if any, by which a particular section is identified among the various sections comprising a specific type of self-contained class, course or cocurricular activity (as identified under item X0223).

X 02 30. LOCATION (1, 2, 5)

X 02 31. Geographical Location (1, 2)
Any designation for geographical location by which a school system or school is identified, e.g., county, or political district. (Op–All)

X 02 32. Room or Space Number (5)
Any designation for the room or space utilized by a section or service activity. (Rec–All) See also the X3400 Series, Location of Instruction (or Service) and the X3500 Series, Facilities.

X 02 40. TYPE OF ORGANIZATIONAL UNIT (1, 2, 3, 4)

X 02 41. Type of School System[7] (1)
The type of organizational unit operating one or more schools, or submitting a report, e.g., a State department of education, an intermediate administration unit, a local school system, and a segment of a local school system.

X 02 41.10 *State Department of Education*—The State agency exercising leadership, service, and regulation responsibilities in regard to elementary and secondary public education and such other aspects of education in the State as lie within the scope of its legal authority. (Rec) (The term "State department of education" is often used interchangeably with the term "State education agency" and in this connection includes the State board of education, the chief State school officer, and their staffs.)

X 02 41.20 *Other State Education Agency*—An organization, other than the State department of education, established by law for carrying out a specified part of the educational responsibilities of the State. (Rec) (For illustration, in some States a separate organization has been established to administer higher education.)

X 02 41.30 *Intermediate Administrative Unit*—An administrative unit smaller than the State which exists primarily to provide consultative, advisory, administrative, or statistical services to local basic administrative units, or to exercise certain regulatory and inspectoral functions over local basic administrative units. (Rec) This includes intermediate administrative units referred to as county intermediate units or supervisory unions. The type of intermediate administrative unit may be specified.

---

[4] John F. Putnam and George G. Tankard, Jr., *Pupil Accounting for Local and State School Systems.* Washington: U.S. Government Printing Office, 1964. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook V, Bulletin 1964, No. 39.

[5] Paul L. Reason and George G. Tankard, Jr., *Property Accounting for Local and State School Systems.* Washington: U.S. Government Printing Office, 1959. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook III, Bulletin 1959, No. 22.

[6] Allan R. Lichtenberger and Richard J. Penrod, *Staff Accounting for Local and State School Systems.* Washington: U.S. Government Printing Office, 1965. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook IV, Bulletin 1965, No. 18.

[7] A definition of "School System" may be found on page 21.

02 IDENTIFICATION—Continued

X 02 41.40 *Local Public School System*—An administrative unit at the local level which exists primarily to operate schools or to contract for school services. (Rec) Public school systems include common, city, independent, consolidated, union, community, town, township, jointure, and county-unit school districts; they include districts operating single schools, e.g., area schools for vocational or special education operated by separate boards of education. For reporting purposes, a *system* of schools operated by a branch of the Federal Government—for children such as those residing on Indian reservations or in the Trust Territory of the Pacific Islands, or for dependents of armed services personnel—is reported under this heading. The local school system may be described further according to type of organization, as illustrated above, and/or according to type of schools operated by indicating one of the first four items following, as appropriate, or the proper combination of the last six items (additional items of information descriptive of schools are included in the 20000 Series):

X 02 41.41 *Does Not Operate Any School*—(Rec)

X 02 41.42 *Operates Area School for Vocational or Technical Education Only*—(Rec)

X 02 41.43 *Operates Area School for Special Education Only* (Rec)

X 02 41.44 *Operates a Single One-Teacher School*—(Rec)

X 02 41.51 *Operates Elementary School(s)*—(Rec)

X 02 41.52 *Operates Middle School(s)*—(Rec)

X 02 41.53 *Operates Secondary School(s)*—(Rec)

X 02 41.54 *Operates Junior College*—(Rec)

X 02 41.55 *Provides Adult Education*—(Rec)

X 02 41.59 *Operates Other Type of School*—(Rec)

X 02 41.60 *Segment of Local Public School System*—A segment of a local public school system, as identified by a designation such as those included under items X0260.20 to X0260.40. (Rec)

X 02 41.70 *Nonpublic School System*—E.g., a system of church-related schools, including a dioscesan school system. (Rec)

X 02 41.90 *Other Unit*—An administrative unit operating schools, or a reporting unit, other than those described in items X0241.10 to X0241.70. (Rec) Any such unit should be specified.

X 02 42. Type of School Organizational Arrangement (2)

The general type of school[8] or other organizational arrangement providing instruction—e.g., an elementary school, a middle school, a secondary school, a junior college, and an adult school—or a more specific subdivision of one of these general categories. In addition, a school may be identified as a day school or residential school, as an area school, and as a vocational and/or technical school. Schools conducted during the summer school term may be identified by combining the appropriate designation for organizational arrangement with a designation from under item X0611 or item X0630 for the time element.

X 02 42.10 *Elementary School*—A school classified as elementary by State and local practice and composed of any span of grades not above grade eight. (Rec–Elem) Elementary schools conducted during the regular school term are identified initially under item X0242.10; organizational patterns or subdivisions within these schools may be identified under items X0242.11 to X0242.14.

X 02 42.11 *Preprimary Level*—A distinct organization for classes within an elementary school for groups of children during the year or years preceding the primary level. (Rec–Elem)

X 02 42.12 *Primary Level*—A distinct organization within an elementary school for pupils in the primary grades or years, usually grade 1 through grade 3 or the equivalent. (Op–Elem) In some instances, the preprimary and primary levels are combined.

X 02 42.13 *Intermediate Elementary Level*—A distinct organization within an elementary school for pupils in the intermediate elementary grades or years, usually grades 4, 5, and 6 or their equivalent. (Op–Elem)

X 02 42.14 *Upper Elementary Level*—A distinct organization within an elementary school for pupils in the upper elementary grades or years, usually grades 7 and 8 or their equivalent. (Op–Elem)

X 02 42.20 *Middle School*—A separately organized and administered school usually beginning with grade 5 or 6 or its equivalent and including at least three grades or years. Most middle schools presume, in ultimate plan if not in present reality, a 4-year high school for the grades or years which follow, as in a 4–4–4 plan or a 5–3–4 plan. (Rec–Middle School)

X 02 42.30 *Secondary School*—A school comprising any span of grades beginning with the next grade following an elementary or middle school and ending with or below grade 12. Secondary schools conducted during the regular school term are identified under items X0242.31 to X0242.35 and X0242.39.

X 02 42.31 *Junior High School*—A separately organized and administered secondary school intermediate between the elementary and senior high schools, usually including grades 7, 8 and 9 (in a 6–3–3 plan) or grades 7 and 8 (in a 6–2–4 plan). (Rec–Sec)

X 02 42.32 *Five- or 6-year High School*—A secondary school served by one faculty organized under one principal which includes more than four grades, is not divided on a junior and senior basis, and is not preceded by a junior high school in the same school system. (Rec–Sec)

X 02 42.33 *Junior-Senior High School*—A secondary school organized on a junior-senior basis and administered under one head as one unit. This includes secondary schools organized on a 2-year junior and a 4-year senior high school plan, a 3-year junior and a 3-year senior high school plan, and any other plan based on a junior-senior organization. (Rec–Sec)

X 02 42.34 *Senior High School*—A secondary school offering the final years of high school work necessary for graduation and invariably preceded by a junior high school. (Rec–Sec)

X 02 42.35 *Four-year High School*—A 4-year secondary school immediately following the elementary school (as in an 8–4 plan) or a middle school. This includes 4-year vocational and technical high schools. (Rec–Sec)

X 02 42.39 *Other Secondary School*—A secondary school conducted during the regular school term, other than those identified under items X0242.31 to X0242.35, such as the *incomplete regular high school* and any newly organized high school that ultimately will have additional grades. (Rec–Sec) A secondary school exclusively for adults and youth beyond the age of compulsory school attendance should not be included here but, rather, should be included under item X0242.50, Adult School or Other Adult Education Instructional Organization.

---

[8] A definition of "School" may be found on page 29.

02 IDENTIFICATION—Continued

X 02 42.40 *Junior College*—An institution of higher education which offers usually the first 2 years of college instruction, frequently grants an associate degree, and does not grant a bachelor's degree. It is either an independently organized institution (public or nonpublic) or an institution which is a part of a public school system or an independently organized system of junior colleges. Offerings include college transfer courses and programs; and/or vocational, technical, and semiprofessional occupational programs or general education programs at the post-secondary instructional level; and may also include continuing education for adults as well as other community services. (Rec–JrC)

Junior colleges may be identified further according to the following designations (with any additional identification of public or nonpublic control made by the use of appropriate categories under item X0250):

X 02 42.41 *Public Junior College*—Including the 2-year public community college and the 2-year State, city, or municipal college, and excluding (for reporting purposes) technical institutes and branch colleges. (Rec–JrC) A public junior college is referred to as a "community college" when it is operated by the board of education of a local basic administrative unit and has an instructional program adapted in content, level, and schedule to the needs of the local community.

X 02 42.42 *Nonpublic Junior College*—Including the independent or church-related institution, and excluding (for reporting purposes) technical institutes and branch colleges. (Rec–JrC)

X 02 42.43 *Two-Year Technical Institute*—An institution offering instruction primarily in one or more of the technologies at the postsecondary instructional level. (Rec–JrC)

X 02 42.44 *Two-year Branch College*—A division of an institution of higher education, which offers the first 2 years of college instruction and which is located in a community different from that of its parent institution and beyond a reasonable commuting distance from the main campus of the parent institution. (Rec–JrC)

X 02 42.49 *Other Junior College*—Any junior college other than those identified under items X0242.41 to X0242.44. (Rec–JrC) Any such institution should be specified.

X 02 42.50 *Adult School or Other Adult Education Organizational Arrangement*—A school only for adults and youth beyond the age of compulsory school attendance, or some other separate adult education organizational arrangement within a school system, college, or other agency or institution, including a technical institute or area vocational school. A sheltered workshop providing vocational training may be included under this heading. (Rec–AdEd)

X 02 42.81 *Day School*—A school attended by pupils during a part of the day, as distinguished from a residential school where pupils are boarded and lodged as well as taught.

X 02 42.82 *Residential School*—An educational institution in which pupils are boarded and lodged as well as taught.

X 02 42.83 *Area School*—A public school which has been approved to provide instruction in a specific instructional area to residents of a State, a county, a major city, or another designated geographic area usually larger than one local basic administrative unit. (Op–All)

X 02 42.84 *Vocational and/or Technical School*—A school which is separately organized under the direction and management of an administrator (such as a principal) for the primary purpose of offering education and training in one or more semiskilled, skilled, or technical occupations. (Op–Sec, JrC, AdEd)

X 02 42.90 *Other School*—A school which cannot be described as an elementary school, middle school, secondary school, junior college, or adult school or other adult education instructional organization. (Rec–All) Any such school should be specified.

X 02 43. Type of Program of Studies[9] (3)

An indication of the general purpose or content of the program of studies, e.g., typical local elementary program, college preparatory program, occupational program, and transfer program.

X 02 43.11 *Typical Local Elementary Program*—The general type of program of studies provided for most elementary school pupils of the local school system. (Rec–Elem)

X 02 43.12 *Typical Local Middle School Program*—The general type of program of studies provided for most middle school pupils of the local school system. (Rec–Middle School)

X 02 43.13 *Typical Local Junior High School Program*—The general type of program of studies provided for most junior high school pupils of the local school system. (Rec–Sec)

X 02 43.20 *Program of Special Education for Handicapped Pupils*—A program of studies designed primarily to help improve or overcome physical, mental, social, and/or emotional handicaps. (Rec–All) Each pupil in such a program in a secondary school (other than a junior high school) or junior college should be identified under *both* this category and a category for another appropriate type of program of studies, as indicated by items X0243.31 to X0243.51.

X 02 43.31 *College Preparatory Program*—A secondary school program of studies designed primarily to prepare pupils for higher education. (Rec–Sec) Areas of specialization may be identified under item X2140. If desired, variations within college preparatory programs may be specified to indicate the general type of college programs for which pupils are preparing, e.g., a 4-year liberal arts program, a 4-year scientific or engineering program, and a 2-year technical program.

Courses designed to enable pupils to enter college with advanced placement in given subject areas and, possibly, with some college credit are identified under item X0245.22, Advanced Placement Course. When a program of studies including several advanced placement courses is designed to enable pupils to enter college with advanced standing (e.g., as a second-semester freshman or with sophomore status), it may be referred to as an "advanced standing program."

X 02 43.32 *Provisions for Postgraduate Studies*—Provisions, within a secondary school, for additional high school study after graduation. (Rec–Sec)

X 02 43.41 *General Education Program*—A secondary school, junior college, or adult education program of studies designed primarily to prepare pupils for the common activities of men as citizens, family members, and workers, and which is contrasted with specialized education which prepares for an occupation. (Rec–Sec, JrC, AdEd) For reporting purposes, pupils in college transfer programs having instructional content of a general education or liberal arts nature should be included under item X0243.51 rather than under this category.

---

[9] A definition of "program of studies" may be found on page 42.

X 02 43.42 *Occupational Program*—A secondary school, junior college, or adult education program of studies designed primarily to prepare pupils for immediate employment or upgrading in an occupation or cluster of occupations. (Rec–Sec, JrC, AdEd) Additional information about such a program should be provided by using appropriate categories under items X2141, Area of Major Specialization; X2142, Area of Minor Specialization; X2143, Type of Occupational Program; and X2144, Occupational Goal of Pupils. For reporting purposes, pupils in college transfer programs having instructional content of an occupational nature should be included under item X0243.51 rather than under this category.

X 02 43.51 *Transfer Program*—A program of studies, at the post-secondary instructional level, designed primarily to yield credits which are normally acceptable by four-year colleges and universities at full (or virtually full) value toward a bachelor's degree. (Rec–JrC) Pupils in transfer programs may be further identified, according to the content of their studies, by using appropriate categories under items X2141, Area of Major Specialization; X2142, Area of Minor Specialization; and X2144, Occupational Goal of Pupils.

X 02 43.61 *Provision for Free Selection*—Provisions enabling pupils to select courses for study without primary concern for the articulation or interrelationships among courses. (Rec–AdEd) For statistical purposes, provisions within a secondary school for free selection of courses by high school postgraduates would be included under item X0243.32, Provisions for Postgraduate Studies.

X 02 43.71 *Rehabilitation Program*—A program of studies and services designed primarily to restore in whole or in part the ability of disabled individuals to perform biologically, psychologically, or sociologically as persons not disabled. (Rec–All) This includes rehabilitation center programs and vocational rehabilitation programs for restoring individuals to economic self-sufficiency through education or retraining.

X 02 43.90 *Other Program of Studies*—A program of studies having a general purpose and nature other than those identified under items X0243.11 to X0243.71. (Rec–All) Any such program of studies should be specified.

X 02 44. Combination of Courses (3)

A combination or sequence of courses, or segments of subject matter, larger than a single course but smaller than an entire program of studies as described under the 30000 Series of chapter 3, e.g., a humanities sequence including given courses in literature, music, art, and social sciences; or an automotive mechanics sequence including given courses in body and fender repair, engine mechanics, and applied physics. (Op–Sec, JrC, AdEd) Descriptions of the elements of such a combination of courses, or segments of subject matter, may be generated from the items of information in the 30000 Series of items of chapter 3 and in chapters 5 and 6.

X 02 45. Type of Class Organizational Arrangement (4)

A class is a group of pupils assigned to one or more teachers for a given period of time in a situation where the teacher(s) and the pupils are in the presence of each other. Thus, a single section of a self-contained class, course, or cocurricular activity is considered to be a class.

X 02 45.10 *Self-contained Class*—A class having the same teacher for all or most of the daily school session. (Rec–All)

X 02 45.20 *Course*—An organization of subject matter and related learning experiences provided for the instruction of pupils on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester, a regular school term, and a 2-week workshop). Credit toward graduation or completion of a program of studies generally is given pupils for the successful completion of a course. (Rec–All)

X 02 45.21 *Vocational Course*—A course approved under State plan requirements for vocational and technical education. (Rec–Sec, JrC, AdEd)

X 02 45.22 *Advanced Placement Course*—A course intended to provide upper-grade secondary school pupils with college-level instruction to enable them, frequently upon the successful completion of an examination, to bypass the usual initial college course in this subject-matter area and begin their college work with a more advanced course and possibly with some college credit. (Rec–Sec)

X 02 45.23 *General Continuation Class*—A part-time class—for persons under 18 years of age who have left full-time instruction to enter the labor force—providing instruction designed primarily to increase civic intelligence rather than to develop specific occupational competence. (Op–AdEd)

X 02 45.29 *Other Course*—A course other than those described under items X0245.21 to X0245.23. (Op–All) Such a course may be specified.

X 02 45.30 *Cocurricular Activity*—An activity, under the sponsorship and/or direction of the school, of the type for which participation generally is not required and credit generally is not awarded. (Rec–Sec, JrC; Op–Elem, AdEd) See also **COCURRICULAR ACTIVITIES** on pages 47 and 242.

X 02 50. CONTROL (1, 2)

The type of governmental agency or other agency having primary legal control of a school system or school.

X 02 51. Public Control (1, 2)

Situations in which the program of a school system or school is under the control of a public agency, is supported primarily by public funds, and is operated by publicly elected or appointed school officials. Among types of governmental agencies having legal control of school systems and schools are the local education agency (sometimes referred to as the local basic administrative unit or local public school district), the city or municipal government, township government, county government, State government, and Federal Government.

X 02 51.10 *Local Education Agency*—(Rec–All)

X 02 51.20 *City or Municipal Government*—(Rec–All)

X 02 51.30 *Township Government*—(Rec–All)

X 02 51.40 *County Government*—(Rec–All)

X 02 51.50 *Other Local Public Agency*—A local public agency not identified by items X0251.10 to X0251.40 and not a combination of any of these, e.g., a local public agency established to operate a program under specific Federal legislation. (Rec–All)

X 02 51.60 *State Government*—(Rec–All)

X 02 51.70 *Federal Government*—(Rec–All)

X 02 51.80 *Combination*—A combination of public agencies identified under items X0251.10 to X0251.90,

02 IDENTIFICATION—Continued

e.g., a group of county school systems operating a junior college or an area vocational school. (Rec–All)

X 02 51.90 *Other Public Agency*—A type of public agency other than those identified in items X0251.10 to X0251.70. (Rec–All) Any such type of agency should be specified.

X 02 52. Nonpublic Control (1, 2)
Situations in which the program of a school system or school is under the legal control of an agency which is not a part of State government, a subdivision of the State government, or the Federal Government, usually is supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials. Among types of nonpublic or private agencies having legal control of school systems and schools are religious groups and groups which are independent of both church and State.

X 02 52.10 *Independent of Church, Nonprofit*—A nonpublic agency, independent of any church, which operates a school system (or school) on a nonprofit basis. (Rec–All)

X 02 52.20 *Religious Group*—An agency, affiliated with a religious group, which operates a school system (or school). (Rec–All)

X 02 52.30 *Proprietary*—A nonpublic agency independent of any church, or an individual, that operates a school system (or school) for business profit. (Rec–All)

X 02 53. Combined Public and Nonpublic Control (1, 2)
A situation in which public and nonpublic agencies jointly provide for the support or the operation of a school or school system, or for both support and operation. The nature of these agencies should be indicated according to the designations of items X0251 and X0252. (Rec–All) To illustrate, in a given settlement school or vocational school the land and buildings might be privately owned, most of the equipment and supplies provided by the local education agency, a portion of the library books provided by the nonpublic agency, the principal and most teachers remunerated by the local education agency, and the librarian, art teacher, and music teacher remunerated by the nonpublic agency.

X 02 54. Control by an Institution (1, 2)
Control by an organization—such as a school, local church, or hospital—which is established to serve a social purpose or end. In addition, the control of the institution itself should be specified according to items X0251, X0252, and X0253.

X 02 54.10 *College or University*—An institution of higher education which has legal control of a school or school system. (Rec–All)

X 02 54.90 *Other Institution*—An institution, other than an institution of higher education, which has legal control of a school or school system, e.g., a hospital, corrective institution, or orphanage. (Rec–All) The nature of any such institution should be specified.

X 02 59. Other Control (1, 2)
A type of institution or agency having primary legal control of a school system or school, other than those institutions, agencies, and arrangements, identified under items X0251 to X0254. (Rec–All) Any such type of agency, institution, or arrangement should be specified.

X 02 60. SCOPE OF CENTRAL ADMINISTRATION (1)
The extent to which the administration of curriculum and instruction of the school system is centralized for an entire system or for a portion of the system.

X 02 60.10 *Central Administration for Entire School System*—Administration of curriculum and instruction centralized for the entire school system. (Rec)

X 02 60.20 *Administration for Geographic Areas*—Administration of curriculum and instruction organized to provide for all schools, or all schools of a given type, located within the various geographic subdivisions of the entire area served by the school system. (Rec)

X 02 60.30 *Central Administration for Given Level or Type of School*—Administration of curriculum and instruction organized to provide for all the school system's instruction of a given level—e.g., elementary, secondary, or postsecondary instructional level—or for all the system's schools of a given type, e.g., elementary schools or secondary schools. This item may be used along with item X0260.20 to indicate that curriculum and instruction are administered centrally for a given level or type of school within the various geographic subdivisions of the area served by the school system. (Rec)

X 02 60.40 *Autonomous Schools*—A school system comprised of a number of schools which are basically independent or self-governing in terms of curriculum and instruction. (Rec)

X 02 60.50 *Single School*—A school system comprised of a single school.(Rec)

X 02 60.90 *Other Administrative Arrangement*—An arrangement other than those described in items X0260.10 to X0260.50. (Rec) Any such arrangement should be specified.

X 02 70. CONTRACT FOR INSTRUCTION OR SERVICE (3, 4, 5)
An indication that instruction or an instructional service is provided through a contractual relationship between a given school or school system and another school, school system, or other agency.

X 02 71.10 *Contract Awarded to Another Agency*—A contract to perform instructional services is awarded by the given school or school system to another agency. (Rec–All)

X 02 71.20 *Contract Awarded to This School, School System, or Agency*—A contract to perform instructional services is awarded to the given school, school system, or agency by another agency. (Rec–All)

X 02 72. Source or Recipient of Contract (3, 4, 5)
Information used in conjunction with the information under items X0271.10 and X0271.20, to indicate the nature of the agency awarding the contract to, or receiving the contract from, the given school, school system, or other agency.

X 02 72.10 *Public School or School System*—(Op–All)
X 02 72.20 *Other Public Agency*—(Op–All)
X 02 72.30 *Nonpublic School or School System*—(Op–All)
X 02 72.40 *Other Nonpublic Agency*—(Op–All)

PLACEMENT (1, 2, 4, 5)
X 03 00 Series

The items of information under this heading may be used to describe ages of pupils, grades, years, and the sequence of courses or classes.

X 03 10. AGE (1, 2)

X 03 10.80 *Less than 1 year old*
X 03 10.01 *1 year old*
X 03 10.02 *2 years old*
X 03 10.03 *3 years old*
X 03 10.04 *4 years old*

03 PLACEMENT—Continued

X 03 10.05 *5 years old*
X 03 10.06 *6 years old*
X 03 10.07 *7 years old*
X 03 10.08 *8 years old*
X 03 10.09 *9 years old*
X 03 10.10 *10 years old*
X 03 10.11 *11 years old*
X 03 10.12 *12 years old*
X 03 10.13 *13 years old*
X 03 10.14 *14 years old*
X 03 10.15 *15 years old*
X 03 10.16 *16 years old*
X 03 10.17 *17 years old*
X 03 10.18 *18 years old*
X 03 10.19 *19 years old*
X 03 10.20 *20 years old*
X 03 10.21 *21 years old*
X 03 10.30 *Over 21 years old* (Specify.)
X 03 10.40 *No compulsory attendance requirement*
X 03 10.50 *No permissive attendance provision*
X 03 10.99 *No age limit*

X 03 11. Span of Compulsory Attendance Ages (1)
The youngest and oldest ages at which children, youths, and adults normally are *required* to attend the schools of the school system.[10] (Rec) Designations for ages are included under item X0310. The date on which these ages are determined may be specified.

X 03 12. Span of Permissive Attendance Ages (1, 2)
The youngest and oldest ages at which children, youths, and adults normally are *permitted* to attend school. (Rec–All) Exceptions to the normal ages of permissive attendance should be specified, with reference made to groups of pupils involved and their span of permissive attendance ages. Designations of ages are included under item X0310; designations for pupil groups are included under item X0900. The date on which ages are determined may be specified.

X 03 20. GRADE (1, 2, 4, 5)
A grade is a designation applied to that portion of the curriculum which represents the work of one regular school term. It is identified by a designation such as kindergarten, grade 1, or grade 10. In some situations—often referred to as "ungraded"—grade designations are not used; designations frequently appropriate in such situations are included under item X0330, Year.

X 03 20.93 *Prekindergarten, Age 3*—A group or class organized to provide educational experiences for children during the year immediately preceding prekindergarten, age 4. (Rec–Elem) Such a group sometimes is referred to as "nursery school."

X 03 20.92 *Prekindergarten, Age 4*—A group or class organized to provide educational experiences for children during the year immediately preceding kindergarten. (Rec–Elem) Such a group sometimes is referred to as "nursery school."

X 03 20.91 *Kindergarten*—A group or class organized to provide educational experiences for children during the year immediately preceding first grade. (Rec–Elem)

X 03 20.01 *Grade 1*—The first of the primary grades. This often is the first grade of compulsory school attendance and follows kindergarten, where kindergarten is provided. (Rec–Elem)

X 03 20.02 *Grade 2*—(Rec–Elem)

X 03 20.03 *Grade 3*—A grade which often is considered to be the final grade of the primary grades. (Rec–Elem)

X 03 20.04 *Grade 4*—A grade which often is considered to be the initial grade of the intermediate grades. (Rec–Elem)

X 03 20.05 *Grade 5*—The grade which is the initial grade of the middle school in a 4–4–4 plan. This is the final grade of the elementary school in a 5–3–4 plan. (Rec–Elem)

X 03 20.06 *Grade 6*—A grade which often is considered to be the final grade of the intermediate grades. This is the final grade of the elementary school in a 6–3–3, a 6–6, or a 6–2–4 plan. (Rec–Elem)

X 03 20.07 *Grade 7*—A grade which often is the initial grade of the upper elementary grades, as in an 8–4 plan. This is the initial grade of the junior high school in a 6–3–3 or 6–2–4 plan. (Rec–Elem, Sec; Op–AdEd)

X 03 20.08 *Grade 8*—The grade which is the final grade of the elementary school in an 8–4 plan, of junior high school in a 6–2–4 plan, or of the middle school in a 4–4–4 or 5–3–4 plan. (Rec–Elem, Sec; Op–AdEd)

X 03 20.09 *Grade 9*—The grade which is the final grade of junior high school in a 6–3–3 plan, the initial grade of senior high school in a 6–2–4 plan, or the initial grade of the 4-year high school in an 8–4 plan. (Rec–Sec; Op–AdEd)

X 03 20.10 *Grade 10*—The grade which is the initial grade of senior high school in a 6–3–3 plan. (Rec–Sec; Op–AdEd)

X 03 20.11 *Grade 11*—(Rec–Sec; Op–AdEd)

X 03 20.12 *Grade 12*—The grade which usually is the final grade of secondary school. (Rec–Sec; Op–AdEd)

X 03 20.13 *Grade 13*—The grade which usually is the initial grade of the college level. (Rec–JrC; Op–AdEd)

X 03 20.14 *Grade 14*—The grade which usually is the final grade in the junior college. (Rec–JrC)

X 03 20.15 *Grade 15*—(Rec-JrC)

X 03 20.16 *Grade 16*—The grade which usually is considered the final year of the 4-year college. (Rec)

X 03 20.20 *Grade 16+*—The grade or grades following the sixteenth grade, usually involving work at the college graduate level. (Rec)

X 03 20.30 *Ungraded*—A situation in which grade designations are not used. (Rec–Elem, Sec) In some such instances, designations for "Year" (see item X0330) may be used for purposes such as indicating the amount of time pupils usually spend in an ungraded school or an ungraded subdivision of a school.

X 03 21. Lowest and Highest Grades (1, 2)
The lowest and highest grades within a school system or school, or the grade equivalent, as indicated by the designations of item X0320. (Rec–All)

X 03 22. Grade Placement (4, 5)
An identification of the grade standing, or the grades, of all or most of the pupils in a course, self-contained class, or section. (Rec–All) Designations for grades are included under item X0320. Those situations in which grade designations are not used may be identified under item X0330.

X 03 30. YEAR (2, 4, 5)
In some situations (referred to as "ungraded"), grade designations are not applied to that portion of the curriculum representing the work of one regular school term. An ungraded school or ungraded organizational level of a school (e.g., ungraded primary level) may be described in part by the number of years most pupils spend in

---

[10] Exceptions, describing pupils not in local public elementary or secondary schools during their years of compulsory school attendance, may be identified with designations from Handbook V, *Pupil Accounting for Local and State School Systems*, pages 57 and 58.

the school or level. Current "grade status" of pupil groups in an ungraded situation may be approximated by indicating the number of years most pupils of each group have been in the school or organizational level. (Rec–Elem, Sec)

X 03 30.10 *1 year or first year*
X 03 30.20 *2 years or second year*
X 03 30.30 *3 years or third year*
X 03 30.40 *4 years or fourth year*
X 03 30.50 *5 years or fifth year*
X 03 30.60 *6 years or sixth year*
X 03 30.70 *7 years or seventh year*
X 03 30.80 *8 years or eighth year*
X 03 30.90 *9 years or ninth year and above*—(Specify.)

X 03 31. Lowest and Highest Years (2)

In ungraded situations, designations which may be used to indicate the number of years, and to identify *which* years, customarily are spent within a given school, or organizational subdivision of a school, as, for example, in an elementary school, in the primary grades of an elementary school, or in a secondary school. (Rec–Elem, Sec) Designations are included under item X0330.

X 03 32. Year Placement (4, 5)

In ungraded situations, an identification of the number of years elapsing since most members of a pupil group began instruction in a school or in an organizational subdivision of the school, e.g., first year, third year, and seventh year. (Rec–Elem, Sec) Designations for years are included under item X0330.

X 03 40. OTHER PLACEMENT (2)

A series of designations other than those presented in items X0320 and X0330 which are indicative of stages or intervals of pupil status in school. (Rec–All) Any such designations—appropriate, for example, in describing the eligibility for education of certain exceptional children, youth, and adults—should be specified.

X 03 50. POSITION IN SEQUENCE (4)

The relative position in sequence of any course or self-contained class which is a part of a series of courses or classes.

X 03 51. Number of Courses or Classes in Sequence (4)—(Op–All)

X 03 51.01 *1 Course or Class*
X 03 51.02 *2 Courses or Classes*
X 03 51.03 *3 Courses or Classes*
X 03 51.04 *4 Courses or Classes*
X 03 51.05 *5 Courses or Classes*
X 03 51.06 *6 Courses or Classes*
X 03 51.07 *7 Courses or Classes*
X 03 51.08 *8 Courses or Classes*
X 03 51.09 *Other Number of Courses or Classes*—(Specify.)

X 03 52. Position of Course or Class in Sequence (4)

The position of the course or self-contained class in relation to the other courses or classes of the sequence. (Op–All)

X 03 52.01 *1st Course or Class*
X 03 52.02 *2nd Course or Class*
X 03 52.03 *3rd Course or Class*
X 03 52.04 *4th Course or Class*
X 03 52.05 *5th Course or Class*
X 03 52.06 *6th Course or Class*
X 03 52.07 *7th Course or Class*
X 03 52.08 *8th Course or Class*
X 03 52.09 *Other Position*—(Specify.)

LEVEL OF DIFFICULTY OR ABILITY (4, 5)
X 04 00 Series

The general difficulty of a course, self-contained class, or cocurricular activity, or of the various sections of the course, or class; and the general level of ability required for successful participation in the activity. If appropriate and desired, the level of difficulty may be described also by use of a grade designation included under item X0320. Modifications in marking practices which reflect differing levels of difficulty should be described.

X 04 10. LEVEL OF DIFFICULTY (4, 5)

X 04 10.10 *Average Difficulty*—The level of difficulty appropriate for most of the pupils of the school system of a given age group. (Rec–Elem, Sec)

X 04 10.20 *Above-average Difficulty*—Greater than average difficulty, including advanced placement courses and special courses or classes for the gifted and/or talented. (Rec–Elem, Sec)

X 04 10.30 *Below-average Difficulty*—Somewhat less than average difficulty, but above the level of work provided for pupils who are mentally retarded. (Rec–Elem, Sec)

X 04 10.40 *For Mentally Retarded*—A level of work appropriate for pupils who are mentally retarded. If desired, this general level could be delineated further according to the degree of retardation of pupils, e.g., for pupils who are educable mentally retarded or trainable mentally retarded. (Rec–Elem, Sec)

X 04 10.80 *Not Applicable*—An indication that a designation for level of difficulty is not considered appropriate or applicable for a given course or class. (Rec–Elem, Sec)

X 04 20. LEVEL OF ABILITY REQUIRED (4, 5)

The general level of ability required for successful participation in a cocurricular or other activity.

X 04 20.10 *Average Ability*—The level of ability of most pupils of the school system of a given age group. (Op–Sec)

X 04 20.20 *Above-average Ability*—Greater than average ability, including special activities for the gifted and/or talented. (Op–Sec)

X 04 20.30 *Below-average Ability*—Somewhat less than average ability. (Op–Sec)

X 04 20.80 *Not Applicable*—An indication that no particular level of ability is required for successful participation in a given activity. (Op–Sec)

APPROVAL AND/OR ACCREDITATION (1, 2, 3, 4)
X 05 00 Series

Items of information under this heading may be used to describe the accreditation status of a school system, school, program of studies, or course—or its approval status, or both—and to identify the approving or certifying agency. Approval of a unit of organization (e.g., a school system, school, program of studies, and course) is the official act of the State department of education, or another recognized agency having official authority, certifying that the unit of organization complies with the *legal requirements or prescribed standards* for the operation of such units. Accreditation of a unit of organization is an official decision by the State department of educa-

05 APPROVAL AND/OR ACCREDITATION—Continued

tion, or another recognized agency having official authority, that, in its judgment, the unit has met the *established standards of quality* (which may or may not have legal status).

X 05 10. APPROVAL STATUS (1, 2, 3, 4)

X 05 10.10 *Approved*—The unit of organization is approved. (Rec–All) If more than one type of approval is available, the type of approval granted should be specified. As applied to a course, this includes vocational and technical education courses approved under the State plan.

X 05 10.20 *Warning or Probation*—The unit of organization, currently approved, may have approval withdrawn by the approving agency unless certain specified deficiencies are corrected. (Rec–All) A time limitation usually is imposed for the correction of such deficiencies.

X 05 10.30 *Approval Denied*—Application has been made for approval, but approval was denied by the approving agency. (Rec–All)

X 05 10.40 *Application in Process*—Application has been made for approval but action on this application has not been completed. (Rec–All)

X 05 10.50 *Approval Not Requested*—Approval has not been requested. (Rec–All) As applied to a course, this includes courses meeting State plan requirements for vocational and technical education but for which approval has not been requested.

X 05 10.60 *Approval Not Available*—Approval is not available for the type of unit of organization. (Rec–All)

X 05 20. APPROVING AGENCY (1, 2, 3, 4)

Information about the agency which can or does grant approval to the unit of organization.

X 05 20.10 *State Department of Education*—The State department of education of the State in which the school system is located, which can or does grant approval. (Rec–All)

X 05 20.20 *Other State Agency*—A State agency, other than the State department of education—e.g., a State board of higher education or a State board of junior colleges—which can or does grant approval. (Rec–All)

X 05 20.90 *Other Agency*—An agency, other than the State department of education or another agency of the State in which the school system is located which can or does grant approval. (Rec–All) Any such agency should be specified.

X 05 30. ACCREDITATION STATUS (2, 3)

X 05 30.10 *Accredited*—The school or program of studies is accredited. (Rec–All)

X 05 30.20 *Warning or Probation*—The school or program of studies, currently accredited, may have accreditation withdrawn by the accrediting agency unless certain specified deficiencies are corrected within a given period of time. (Rec–All)

X 05 30.30 *Accreditation Denied*—The school has applied for accreditation, but accreditation was denied by the accrediting agency. (Rec–All)

X 05 30.40 *Application in Process*—Application has been made for accreditation but a final decision has not been reached. (Rec–All) This includes institutions which have been granted "Candidate Status."

X 05 30.50 *Accreditation Not Requested*—Accreditation has not been requested. (Rec–All)

X 05 30.60 *Accreditation Not Available*—Accreditation is not available to the school or program of studies. (Rec–All)

X 05 40. ACCREDITING AGENCY (2, 3)

Information about the agency which can or does grant accreditation to the school or program of studies.

X 05 40.10 *State Department of Education*—The State department of education of the State in which the school is located, which can or does grant accreditation to the school or program of studies. (Rec–All)

X 05 40.20 *Regional Accrediting Association*—A voluntary nongovernmental organization established to administer an accrediting procedure in a geographic area including more than one State but less than all. (Rec–All)

X 05 40.30 *Professional Association*—A recognized voluntary nongovernmental professional association administering an accrediting procedure for specific types of schools or programs of studies. (Rec–Sec, JrC, AdEd)

X 05 40.40 *Technical and/or Business Association*—A recognized voluntary nongovernmental technical or business association administering an accrediting procedure for specific types of schools or programs of studies. (Rec–Sec, JrC, AdEd)

X 05 40.90 *Other Agency*—An agency—other than the State department of education of the State in which the school is located, a regional accrediting association, or a professional association—which can or does grant accreditation to the school or program of studies. (Rec–Sec, JrC, AdEd) Any such agency should be specified.

TIME ELEMENTS (1, 2, 3, 4, 5)
X 06 00 Series

Items of information under this heading may be used to indicate the manner in which time is organized for various segments of the school year and the school day.

X 06 10. SCHOOL YEAR (1, 2)

The school year is defined as the 12-month period of time denoting the beginning and ending dates for school accounting purposes, usually from July 1 to June 30; a school term is defined as a prescribed span of time when school is open and the pupils are under the direction and guidance of teachers. The school year may include one or more school terms, the most common of these terms being the regular and summer school terms. These terms sometimes are further subdivided into shorter terms such as semesters and quarters.

X 06 11. Division of School Year (1, 2)

X 06 11.10 *Regular School Term and Summer School Term*—(Rec–All)

X 06 11.20 *Regular School Term Only*—(Rec–All) Designations for divisions of the regular school term are included under item X0621.

X 06 11.30 *Three Trimesters*—Three approximately equal school terms of about 3 to 4 months each, the quantity of school work for each term being intended to approximate the usual amount of work for a typical semester. (Rec–All)

X 06 11.40 *Four Quarters*—Four approximately equal school terms of about three months each. (Rec–All)

X 06 11.80 *Combination*—A combination of two or more patterns of time for the school year for different schools, programs of studies, or pupil groups. (Rec–All) The various patterns may be specified.

X 06 11.90 *Other Division*—A division or organization of the school year other than those identified under items X0611.10 to X0611.80, e.g., summer school term only. (Rec–All) Any such division or organization should be specified.

X 06 20. REGULAR SCHOOL TERM (1,2)

The regular school term is that school term which begins usually in the late summer or fall and ends in the spring. It may be interrupted by one or more vacations.

X 06 21. Division of Regular School Term (1, 2)

The manner in which the regular school term is divided into segments such as semesters, trimesters, and quarters. Designations for the number of reporting periods during the regular school term are included under item X0850.10.

X 06 21.10 *Single Term*—A regular school term containing no major subdivisions of time (e.g., no semesters and no quarters). (Rec–All)

X 06 21.20 *Semesters*—A regular school term consisting of 2 equal segments, each of about 16 to 18 weeks duration. (Rec–Sec, JrC, AdEd)

X 06 21.30 *Trimesters*—A school year consisting of 3 equal segments, 2 of which are considered to comprise the regular school term. (Rec–JrC, AdEd)

X 06 21.40 *Quarters*—A school year consisting of 4 equal segments, 3 of which are considered to comprise the regular school term. (Rec–JrC, AdEd)

X 06 21.90 *Other Division*—A regular school term divided in a manner other than those identified under items X0621.10 to X0621.40. (Rec–All) Any such division should be specified.

X 06 22. Calendar Months (1, 2)

The number of calendar months indicating, to the nearest whole month, the amount of elapsed time from the first day in session to the last day in session for the regular school term. (Op–All)

X 06 22.01 *1 Month or Less*
X 06 22.02 *2 Months*
X 06 22.03 *3 Months*
X 06 22.04 *4 to 6 Months*
X 06 22.05 *7 Months*
X 06 22.06 *8 Months*
X 06 22.07 *9 Months*
X 06 22.08 *10 Months*
X 06 22.09 *11 or 12 Months*

X 06 23. Equivalent Weeks (1, 2)

The number of equivalent weeks (not calendar weeks) during which school is in session for the regular school term, expressed to the nearest full week. (Op–All) Where used for school accounting purposes, and *equivalent week* generally refers to 5 days in session and represents one-fourth of a "school month" which usually contains 20 days in session, or the equivalency of 4 weeks. If the number of weeks is less than 30 or more than 44, this number should be specified.

X 06 23.09 *Less than 30 Weeks*
X 06 23.30 *30 Weeks*
X 06 23.39 *31 Weeks*
X 06 23.32 *32 Weeks*
X 06 23.33 *33 Weeks*
X 06 23.34 *34 Weeks*
X 06 23.35 *35 Weeks*
X 06 23.36 *36 Weeks*
X 06 23.37 *37 Weeks*
X 06 23.38 *38 Weeks*
X 06 23.39 *39 Weeks*
X 06 23.40 *40 Weeks*
X 06 23.41 *41 Weeks*
X 06 23.42 *42 Weeks*
X 06 23.43 *43 Weeks*
X 06 23.44 44 Weeks
X 06 23.89 *More than 44 Weeks*

X 06 24. Days in Session (1, 2)

The number of days in session during the regular school term. (Rec–All) A day in session is a day on which the school is open and the pupils are under the guidance and direction of teachers, plus days on which the school plant is closed and the student body as a whole is engaged in school activities outside the school plant under the guidance and direction of teachers. For some purposes it may be preferable to indicate the actual number of days in session rather than use the categories which follow. If the number of days in session is less than 160 or more than 209, this number should be specified.

X 06 24.01 *Less than 160 Days*
X 06 24.02 *160–169 Days*
X 06 24.03 *170–174 Days*
X 06 24.04 *175–179 Days*
X 06 24.05 *180–184 Days*
X 06 24.06 *185–189 Days*
X 06 24.07 *190–199 Days*
X 06 24.08 *200–209 Days*
X 06 24.09 *More than 209 Days*

X 06 30. SUMMER SCHOOL TERM (1, 2)

The summer school term is that school term which takes place in the summer during the period between the end of one regular school term and the beginning of the next regular school term.

X 06 32. Calendar Months in Summer School Term (1, 2)

The number of calendar months indicating, to the nearest whole month, the amount of elapsed time from the first day in session to the last day in session for the summer school term. (Op–All) The designations of item X0622 may be used to indicate the number of calendar months in the summer school term.

X 06 33. Calendar Weeks in Summer School Term (1, 2)

The number of calendar weeks during which school is in session for the summer school term, expressed to the nearest full week. (Op-All) If the number of weeks is less than three or more than nine, this number should be specified.

X 06 33.02 *Less than 3 Weeks*
X 06 33.03 *3 Weeks*
X 06 33.04 *4 Weeks*
X 06 33.05 *5 Weeks*
X 06 33.06 *6 Weeks*
X 06 33.07 *7 Weeks*
X 06 33.08 *8 Weeks*
X 06 33.09 *9 Weeks*
X 06 33.01 *More than 9 Weeks*

X 06 34. Days in Session in Summer School Term (1, 2)

The number of days school is in session during the summer school term. (Rec–All) For some purposes it may be preferable to indicate the actual number of days in session rather than use the categories which follow. If the number of days is less than 11 or more than 60, this number should be specified.

X 06 34.01 *Less than 11 Days*
X 06 34.02 *11–20 Days*
X 06 34.03 *21–25 Days*
X 06 34.04 *26–30 Days*
X 06 34.05 *31–35 Days*
X 06 34.06 *36–40 Days*
X 06 34.07 *41–50 Days*
X 06 34.08 *51–60 Days*
X 06 34.09 *More than 60 Days*

X 06 40. SCHOOL DAY (2)

A school day is that part of a calendar day when school is in session. Included under this heading are items of information which can be used to identify the organization of time segments comprising the typical school day.

X 06 41. Sessions in School Day (2)

A session is the period of time during the school day when a given group of pupils is under the guidance and direction of teachers. The manner in which the school day is organized for the various sessions of the school may be described by items under this heading.

X 06 41.10 *Single (1) Session*—A school day consisting of a single session. (Rec–Elem, Sec)

X 06 41.20 *Double (2) Sessions*—A school day consisting of separate sessions for two groups of pupils in the same instructional space, e.g., one room used by one fourth-grade class in the morning and by another fourth-grade class in the afternoon; or one school building used by high school juniors and seniors during a morning session and by freshmen and sophomores during an afternoon session. (Rec–Elem, Sec)

X 06 41.30 *Two Overlapping Sessions*—A school day consisting of two overlapping sessions with separate times for two different groups of pupils to start and end their sessions in the same school plant, e.g., high school juniors and seniors begin their session at 7:30 a.m. and the freshmen and sophomores begin their session at 8:30 a.m., the session for juniors and seniors ending one hour prior to the time the session ends for the freshmen and sophomores. (Rec–Elem, Sec)

X 06 41.40 *Three or More Overlapping Sessions*—A school day consisting of three or more overlapping sessions with separate times for three or more different groups of pupils to start and end their sessions in the same school plant. (Rec–Elem, Sec)

X 06 41.90 *Other Organization*—Sessions of the school day organized in a manner other than those identified in items X0641.10 to X0641.40. (Rec–Elem, Sec) Any such organization should be specified.

X 06 45. Minutes in School Day (2)

The number of minutes the school is in operation during all the sessions of the typical school day. (Op–All) For some purposes it may be preferable to indicate the actual number of minutes rather than use the categories which follow.

X 06 45.01 *Less than 240 Minutes*—(*Specify.*)
X 06 45.02 *240–269 Minutes*
X 06 45.03 *270–299 Minutes*
X 06 45.04 *300–329 Minutes*
X 06 45.05 *330–359 Minutes*
X 06 45.06 *360–419 Minutes*
X 06 45.07 *420–479 Minutes*
X 06 45.08 *480–539 Minutes*
X 06 45.09 *540 Minutes and More*—(Specify.)

X 06 50. DAILY SESSION (2, 3)

A session is that period of time during the school day when a given group of pupils is under the guidance and direction of teachers. An identification of the type of session and the organization of time segments comprising each session is included under this heading. This information may be recorded according to level, e.g., for kindergarten, for grades 1 to 3, and for grades 4 to 6.

X 06 51. Type of Session (2)

Identification of the type of session, e.g., full-day session, half-day session, and curtailed session.

X 06 51.10 *Full-day Session*—A school session which contains at least the minimum number of hours recommended by the State education agency for a full day of attendance in a given elementary or secondary grade other than kindergarten or prekindergarten. (Rec–Elem, Sec)

X 06 51.20 *Half-day Session*—A school session which contains the minimum number of hours recommended by many State education agencies for kindergarten or prekindergarten instruction (or instruction for certain groups of handicapped pupils) when the length of this session aproximates half the number of hours recommended for a full-day session in other elementary grades. (Rec–Elem)

X 06 51.30 *Curtailed Session*—A school session with less than the number of hours of instruction recommended by the State education agency. (Rec–Elem, Sec)

X 06 51.90 *Other Type of Session*—A type of session other than those identified under items X0651.10 to X0651.30, e.g., two groups of pupils attend school on alternate days of the week. (Rec–Elem, Sec) Any such type of session should be specified.

X 06 52. Organization of Time Segments in Session (2, 3)

X 06 52.10 *Entire Session (Self-contained Class)*—A session in which classes meet with the same teacher or team of teachers in the same teaching space for all or most of the time. (Rec–Elem, Sec)

X 06 52.20 *Partially Departmentalized Session*—A session in which classes have the same teacher for a major portion of the time (e.g., for English language arts, social studies, and other instruction provided daily) and subject matter specialists as teachers for other portions of the daily schedule (e.g., special teachers for mathematics, music, and science). (Rec–Elem, Sec)

X 06 52.30 *Uniform Class Periods*—Time segments of equal length which comprise the portion of the session devoted to instruction. (Rec–Sec)

X 06 52.31 *Single Period*—A time segment, consisting of a single class period, during which classes meet with each teacher or team of teachers. (Op–Sec)

X 06 52.32 *Multiple Periods (Block of Time)*—A time segment, consisting of two or more successive class periods but less than an entire session, during which classes meet with each teacher or team of teachers. (Op–Sec)

X 06 52.33 *Combination of Single and Multiple Periods*—An arrangement whereby classes meet with each teacher or team of teachers on a varying schedule, for a single class period on some days and for more than a single period on other days. (Op–Sec)

X 06 52.40 *Nonuniform Class Periods*—A session in which time devoted to instruction consists of class periods of varying length. (Rec–Sec) If nonuniform class periods result from the use of procedures for flexible scheduling, this fact may be indicated.

X 06 52.50 *Modules of Time*—A session comprised of uniform portions or modules of time—each module generally a fraction of the usual time for a class period—which are combined in various multiples, as appropriate for various courses and activities. (Rec–Elem, Sec)

X 06 52.60 *Combination of Class Periods and Modules*—A session composed of class periods and modules. (Rec–Elem, Sec)

X 06 52.70 *Homeroom Period*—A portion of a session, in a departmentalized instructional organization, during which a teacher and a group of pupils meet primarily for purposes of checking attendance, making announcements, and attending to other administrative details. (Rec–Sec)

06 TIME ELEMENTS—Continued

X 06 52.80 *Activity and/or Assembly Period*—A portion of the session, occurring on one or more days of the week at a time when no courses are scheduled, the time being devoted to various co-curricular activities including assemblies. In some instances, this period is combined with the homeroom period described under item X0652.70. (Rec–Sec)

X 06 52.90 *Other Organization*—An organization of the session other than those identified under items X0652.10 to X0652.80. (Rec–Sec) Any such organization should be specified.

X 06 55. Minutes in Session (2, 3)

The number of minutes that given pupil groups (e.g., pupils in kindergarten, grade 6, or grade 12) are in session during the day, *including* lunch and recess time, expressed according to category of time as follows. (Rec–Elem, Sec; Op–AdEd) For some purposes it may be preferable to indicate the actual number of minutes rather than use the categories which follow.

X 06 55.01 *Less than 180 Minutes—(Specify.)*
X 06 55.02 *180–239 Minutes*
X 06 55.03 *240–299 Minutes*
X 06 55.04 *300–359 Minutes*
X 06 55.05 *360–389 Minutes*
X 06 55.06 *390–419 Minutes*
X 06 55.07 *420–449 Minutes*
X 06 55.08 *450–479 Minutes*
X 06 55.09 *480 Minutes and More*—(Specify.)

X 06 56. Minutes of Instruction in Session (2, 3)

The number of minutes that given pupil groups are in session during the day, *exclusive* of time for lunch, recess, and homeroom periods. (Rec–Elem, Sec; Op–AdEd) The designations of item X0655 may be used to indicate the number of minutes of instruction in the session.

X 06 60. CLASS PERIOD (2, 3, 4, 5)

An identification of the number and length of class periods during a typical daily session in a *departmentalized organization*. A class period is a unit of time, a portion of the daily session set aside for instruction in classes, when most classes meet for a single such unit of time.

X 06 65. Minutes in Class Period (2, 3, 4, 5)

The typical length of uniform class periods, exclusive of time for passing between classes, expressed in minutes. (Rec–Sec, JrC; Op–AdEd) For some purposes it may be preferable to indicate the actual number of minutes rather than use the categories which follow.

X 06 65.01 *Less than 40 Minutes*—(Specify.)
X 06 65.02 *40–44 Minutes*
X 06 65.03 *45–49 Minutes*
X 06 65.04 *50–54 Minutes*
X 06 65.05 *55–59 Minutes*
X 06 65.06 *60–64 Minutes*
X 06 65.07 *65–74 Minutes*
X 06 65.08 *75–94 Minutes*
X 06 65.09 *95 Minutes and More*—(Specify.)

X 06 66. Number of Class Periods in Typical Daily Session (2, 3)

The maximum number of class periods for an individual pupil in a typical daily session, when this number generally is uniform for all the days of the week. (Rec–Sec, JrC) If the maximum number is not uniform, the number of class periods for the week may be indicated under item X0667.

X 06 66.02 *1 or 2 Class Periods*
X 06 66.03 *3 Class Periods*
X 06 66.04 *4 Class Periods*
X 06 66.05 *5 Class Periods*
X 06 66.06 *6 Class Periods*
X 06 66.07 *7 Class Periods*
X 06 66.08 *8 Class Periods*
X 06 66.09 *9 or More Class Periods*—(Specify.)
X 06 66.01 *Irregular Number of Class Periods*

X 06 67. Number of Class Periods in Typical Week (2, 3)

The maximum number of class periods for an individual pupil during a week, when the number is not uniform for all the days of the week. (Rec–Sec, JrC; Op–AdEd) When the maximum number generally is uniform, the number of class periods in a typical daily session should be indicated under item X0666.

X 06 70. MODULE OF TIME (2, 3, 4)

An identification of the number and length of modules of time during a typical daily session. A module is a unit of time, a portion of the daily session set aside for instruction in classes, when most classes meet for two or more such units of time.

X 06 71. Variation in Modules (2)

X 06 71.10 *No Variation*—A uniform number of modules per day, week, or term—for all courses and all groups of pupils—for instruction yielding one unit of value.[11] (Rec–Sec)

X 06 71.20 *Varying for Different Groups*—A differing number of modules per day, week, or term—for various courses or for various groups of pupils—for instruction yielding one unit of value.[12] (Rec–Sec)

X 06 75. Minutes in Module (2)

The typical length of modules, expressed in minutes. (Rec–Sec) For some purposes it may be preferable to indicate the actual number of minutes rather than use the categories which follow.

X 06 75.01 *Less than 10 Minutes*—(Specify.)
X 06 75.02 *10 and 11 Minutes*
X 06 75.03 *12 to 14 Minutes*
X 06 75.04 *15 to 19 Minutes*
X 06 75.05 *20 to 29 Minutes*
X 06 75.06 *30 Minutes and More*—(Specify.)

X 06 76. Number of Modules in Typical Daily Session (2)

The number of modules in a typical daily session, when this number generally is uniform for all the days of the week. (Rec–Sec) If the number is not uniform, the number of modules in a typical week may be indicated under item X0677. For some purposes it may be preferable to indicate the actual number of modules rather than use the categories which follow.

X 06 76.01 *Less than 5 Modules*—(Specify.)
X 06 76.02 *5–7 Modules*
X 06 76.03 *8–10 Modules*
X 06 76.04 *11–13 Modules*
X 06 76.05 *14–16 Modules*
X 06 76.06 *17–19 Modules*
X 06 76.07 *20–22 Modules*
X 06 76.08 *23–25 Modules*
X 06 76.09 *26 Modules and More*—(Specify.)

X 06 77. Number of Modules in Typical Week (2)

The number of modules during the week, when the number is not uniform for all the days of the week. (Rec–Sec) This number should be specified. If the number of modules generally is uniform for all the days, the number in a typical daily session should be indicated under item X0676.

X 06 78. Usual Number of Modules Per Day for Unit of Value(2, 4)

The usual (or average) number of modules

---

[11] See item X0810 for a description of a unit of value.
[12] See item X0810 for a description of a unit of value.

06 TIME ELEMENTS—Continued

per day (or per week) for instruction yielding one unit of value.[13] (Rec–Sec) Designations for modules per week are included under item X0812.

X 06 78.02 *2 Modules*
X 06 78.03 *3 Modules*
X 06 78.04 *4 Modules*
X 06 78.05 *5 Modules*
X 06 78.06 *6 Modules*
X 06 78.07 *7 Modules*
X 06 78.08 *8 Modules*
X 06 78.09 *9 Modules*
X 06 78.01 *More than 9 Modules*—(Specify.)

X 06 80. DESCRIPTION OF TIME ELEMENTS (4, 5)

X 06 81. Year and Term (4, 5)

An identification of the school year and term when a specific course, self-contained class, or section is scheduled (e.g., the 1969–70 school year, and the regular school term, fall semester, or summer school term). (Rec–All)

X 06 82. Frequency of Service (5)

The frequency with which a given service or service activity is made available.

X 06 82.10 *Annually*—Once a year. (Op–All) In addition, the time of year and span of time may be specified.

X 06 82.20 *Semiannually*—Twice a year. (Op–All) In addition, the times of the year and spans of time may be specified.

X 06 82.30 *Monthly*—Once a month. (Op–All) In addition, the span of time for each month may be specified.

X 06 82.40 *Weekly*—Once a week. (Op–All) In addition, the span of time for each week may be specified.

X 06 82.50 *Given Days of Week*—The same 2 to 4 days each week. (Op–All) The specific days of the week should be included in item X0683.

X 06 82.60 *Daily*—Every day. (Op–All) The specific hours of the day should be included in item X0685.

X 06 82.70 *Other Schedule*—A regular schedule other than those identified under items X0682.10 to X0682.60. (Op–All) Any such schedule should be specified.

X 06 82.80 *As Required*—The service is made available or performed as required, but not on a regular schedule. (Op–All)

X 06 83. Days of Week (4, 5)

The day or days of the week on which a section of a course or self-contained class meets, e.g., Tuesday and Thursday; or, if these days vary from week to week, the scheduling cycle or plan for scheduling meeting days.[14] (Rec–Sec, JrC, AdEd)

X 06 84. Number of Days Per Week (4, 5)

The number of days per week that a section of a course or self-contained class typically meets. (Op–Sec, JrC, AdEd)

X 6 84.01 *1 Day*
X 06 84.02 *2 Days*
X 06 84.03 *3 Days*
X 06 84.04 *4 Days*
X 06 84.05 *5 Days*
X 06 84.06 *6 Days*
X 06 84.07 *7 Days*
X 06 84.08 *Variable Number of Days*

X 06 85. Time of Day, Hour of Day, or Period Number(s) of Section Meeting or Service (4, 5)

The clock hour of the day or the period number of a section meeting; or, if this hour or period varies from day to day, the plan for scheduling the hour or period for section meetings.[14] (Rec–Sec, JrC, AdEd) In addition, the time of day of class meetings may be recorded. For adult education classes, this could indicate "day time," "late afternoon or evening," or "other time"; for certain elementary and secondary classes, this could indicate "before session" in the morning, or "after session" in the afternoon. (Op–All)

X 06 86. Time Segment for Class or Course (4, 5)

The amount of time in those daily sessions during which the course or self-contained class typically meets, e.g., the entire session, a block of time, a class period, and a variable amount of time.

X 06 86.11 *Entire Session*—(Op–Elem, AdEd)

X 06 86.12 *Block of Time*—A time segment consisting of two or more consecutive class periods but less than an entire daily session. (Op–Sec)

X 06 86.13 *Single Class Period*—(Op–Sec)

X 06 86.14 *Modules of Time*—One or more modules of time. (Op–Sec) The number of modules may be specified.

X 06 86.15 *Variable Amounts of Time*—Time segments which vary for the different days of the week during which course meets. (Op–Sec)

X 06 86.19 *Other Amount of Time*—Time segments other than those identified under items X0685.11 to X0685.15, including situations in which time in the daily session varies for different sections of the course and situations in which the number of meetings of the section varies from one week to another. (Op–Sec) This amount or schedule of time should be specified.

X 06 87. Minutes Per Week (4, 5)

The number of minutes per week that a section of a course, self-contained class or cocurricular activity typically meets. (Op–All) Appropriate designations are included under item X0813. If desired for identifying the amount of time for instruction in a given subject-matter area within a self-contained class, these same designations may be used. If the number of minutes varies from week to week, this fact should be indicated and an average number of minutes per week specified. If the number of minutes varies because of a scheduling cycle of other than one or five days, this fact may be indicated; the number of days in the scheduling cycle also may be noted (see also "Scheduling Cycle" in the glossary).

X 06 88. Number of Weeks (4, 5)

The number of equivalent weeks (not calendar weeks) during which a section of the course, self-contained class, or cocurricular activity typically meets. (Op–All) For some purposes it may be preferable to indicate the actual number of weeks rather than use the categories which follow. If a given course is scheduled as a part of a cycle scheduling plan, this arrangement also may be indicated.

X 06 88.01 *Less than 5 Weeks*
X 06 88.02 *5–8 Weeks*
X 06 88.03 *9–12 Weeks*
X 06 88.04 *13–20 Weeks*
X 06 88.05 *21–32 Weeks*
X 06 88.06 *33–36 Weeks*
X 06 88.07 *37–40 Weeks*
X 06 88.08 *41–44 Weeks*
X 06 88.09 *45–52 Weeks*

X 06 89. Miscellaneous Times for Class Meetings (4, 5)

Days other than those on which classes usually meet, e.g., days during weekends, summer vacation, Thanksgiving vacation, Christmas vacation, and spring vacation. (Op–All)

---

[13] See item X 08 10 for a description of a unit of value.

[14] The glossary includes definitions for "Scheduling Cycle" and "Cycle Scheduling."

06 TIME ELEMENTS—Continued

X 06 90. OTHER TIME ELEMENTS (1, 2, 3, 4, 5)

Time elements, other than those included under items X0610 to X0689, which may be used to indicate the manner in which time is organized for various segments of the school year and the school day, e.g., length of homeroom period and length of activity period. (Op–All) Any such time element should be specified.

EVALUATION AND CURRICULUM IMPROVEMENT (1, 2, 3, 4)

X 07 00 Series

The items of information under this heading may be used to describe the background considerations, organization, personnel, and activities involved in evaluating and/or improving the instructional program of a school system, school, or other organizational unit.

Evaluation generally involves an appraisal of current status and a comparison of this status with (a) the extent to which it attains predetermined objectives and purposes, (b) appropriate criteria or standards, (c) previous status, or (d) current status of others. Evaluation findings frequently provide the basis for activities undertaken to improve the instructional program of the school system.

Curriculum improvement encompasses activities having as their purpose the development or improvement of the curriculum, including the programs of studies, cocurricular activities, and instructional services of the school system or school. These activities include considering educational needs of pupils and community; identifying general aims and specific objectives; selecting and organizing appropriate content and learning experiences; identifying appropriate methods and resources; preparing curriculum guides and other resource materials; testing and recommending such resource materials; and providing for continuous, methodical study, evaluation, and improvement of the existing instructional program. This includes the activities of any systemwide or schoolwide curricular advisory committee.

X 07 10. BACKGROUND OF THE INSTRUCTIONAL PROGRAM (1, 2, 3, 4)

A selection of factors which are considered in the evaluation process because they are descriptive of the community, the pupils, and other underlying determinants of the design of the instructional program.

X 07 10.11 *Philosophy of the School System*—The officially adopted statement expressing the ideals the school system attempts to realize in its practices. (Rec–All) This statement—frequently including considerations such as (a) the responsibility of the school system to the community, and its relationship to other community agencies providing education; (b) present knowledge of the nature of youth with their differing needs, interests, and abilities; (c) present knowledge of the nature of learning and of aspects of knowledge itself; and (d) a concept of the roles and relationships of teachers, pupils, administrators, and others—may be used as a basis for the general determination, interpretation, and evaluation of the school system's policies and activities. Many persons and groups involved in developing the statement of philosophy may be identified by using the categories of item X0730.

X 07 10.12 *Philosophy of the School*—The officially adopted statement expressing the ideals the school attempts to realize in its practices. (Rec–All) See also item X0710.11, Philosophy of the School System.

X 07 10.13 *Aims of the School System*—A statement of what the school system is attempting to do to meet the needs and interests of its pupils and patrons, in accordance with its statement of philosophy. (Rec–All) Persons and groups involved in developing the statement of aims may be identified with the use of the categories of item X0730.

X 07 10.14 *Aims and Objectives of the School*—The statement of the general, long-range aims and the specific, short-range objectives which indicate what the school is attempting to do to meet the needs of its pupils and patrons, in accordance with the philosophy, aims, and policies of the school system and school. (Op–All)

X 07 10.21 *School System Policies*—A statement of judgments, derived from a system of values and an assessment of situational factors, operating within the school system as a general plan for guiding decisions about how to attain desired educational aims and objectives. (Rec–All) Persons and groups involved in developing the policy statement may be identified with the use of the categories of item X0730.

X 07 10.22 *Rules and Regulations of School*—A statement of judgments—based on school system policy, and reflecting a system of values and an assessment of situational factors—operating within the school as a general plan for guiding decisions about how to attain desired educational aims and objectives. (Op–All)

X 07 10.30 *Characteristics of the Community*—The various social and economic characteristics which serve to indicate the nature of the neighborhood or community, including trends and projections as well as current status, e.g., general type of community, composition of population, general socioeconomic level as indicated by the community occupational structure or the general educational level of parents, and identified problems and needs of the community. (Rec–All) Certain community resources—such as education-related agencies, civic organizations, and recreational opportunities—may be identified under the X3300 Series on page 96.

X 07 10.31 *General Type of Community*—Factors such as location (e.g., central city, suburban, or rural); governmental structure; tax base; and residential, business, industrial, utility, and transportation characteristics. (Op–All)

X 07 10.32 *Composition of Population*—Identified characteristics of residents of the school community such as age, sex, ethnic origin (or race), regional or national origin, languages spoken in the home, proportion of families receiving welfare assistance, level of income, housing characteristics, migration or mobility rates, and proportion of employed residents commuting to work.

X 07 10.33 *Occupational Structure of School Community*—An identification of the general occupational structure of the school community. (Op–All) In some instances, a composite picture is obtained by use of a rating scale utilizing values such as 0—professional persons; 1—farmers (owners and tenants of large-scale operations); 2—proprietors, managers, and officials (except farmers); 3—clerks and

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

kindred workers; 4—skilled workers and foreman; 5—semiskilled workers; 6—farm laborers; 7—other laborers; and 8—servant occupations.

X 07 10.34 *Educational Level of Parents*—An identification of the general level of education of the parents of the pupils. (Op–All) One way to obtain a composite picture of this level is through the use of a scale indicating the highest diploma or degree received.

X 07 10.35 *Problems of the School Community*—Identified problems of the school community, e.g., excessive juvenile delinquency, poverty, intergroup tensions, intergroup communication problems, inadequate housing, health problems, transportation difficulties, and insufficient employment opportunities. (Op–All)

X 07 10.36 *Needs of the School Community*—Identified needs of the community, e.g., additional library facilities, additional recreational opportunities, improved housing, and additional employment opportunities. (Op–All)

X 07 10.39 *Other Characteristics*—Information about characteristics, other than those identified under items X0710.31 to X0710.36, which serve to indicate the nature of the community, e.g., cultural, geographic, residential, business, and industrial characteristics. (Op–All)

X 07 10.40 *School-community Relations*—The manner in which representatives of the school and the community work together to identify and provide for individual and group interests and needs of pupils, parents, and members of various other community groups. (Rec–All) This includes the activities of any lay advisory committee.

X 07 10.41 *Community Opinion*—The general opinion of a representative sampling of members of various community groups (e.g., pupils, parents, business, industry, and labor) concerning problems, needs, and activities of the community and its school or schools; also the manner in which such opinion is determined. (Op–All)

X 07 10.42 *School-community Planning*—Coordination between representatives of the school and representatives of community groups in planning for the development and use of resources in meeting the interests and needs of pupils, parents, and members of various other community groups. (Op–All)

X 07 10.43 *Home-school Relations*—Relations between the school and its staff members and the parents of the pupils, with particular attention given to the ways in which the school staff and parents work together in helping pupils derive maximum benefit from their educational experiences. (Op–All)

X 07 10.44 *Participation of Parents in School Activities and Affairs*—The manner in which parents take part in school activities and affairs, e.g., through participation in a parent-teacher organization, or by providing personal and financial support of specific school activities. (Op–All)

X 07 10.49 *Other Aspects of School-community Relations*—Aspects of school-community relations other than those included under items X0710.41 to X0710.44. (Op–All) Any such aspect should be specified.

X 07 10.50 *Characteristics and Needs of the Pupils*—Identified general pupil characteristics and needs which provide, or might provide, a basis for educational planning by the school. (Rec–All) Other items describing pupils are included in the X0900 Series, Pupils Served.

X 07 10.51 *Scholastic Ability*—The level, range, and distribution of all pupils according to intellectual, physical, and social characteristics, as obtained from standardized instruments and other sources of information. (Op–All)

X 07 10.52 *Exceptionality*—The number of pupils according to type of exceptionality, as identified by professionally qualified personnel. (Rec–All) For designations for types of exceptionality, see item X0960.

X 07 10.53 *School Placement*—The distribution of pupils according to the type of school in which they receive instruction (e.g., elementary school, junior college, and elementary school for physically handicapped) and according to age and grade (i.e., age-grade distribution). (Op–All)

X 07 10.54 *Educational and Career Intentions*—The distribution of pupils according to intentions and plans for future education and careers. (Op–All)

X 07 10.55 *School Performance*—The general nature and quality of pupils' activities and accomplishments within the school program, such as the range and distribution of pupils according to courses studied, cocurricular activities, grade progression, scholarship awards, and diplomas, certificates, or degrees awarded for completion of school work. (Op–All)

X 07 10.56 *Nonschool Performance*—The general nature of pupils' participation and accomplishments in employment and other significant activities performed outside the school, whether performed during school terms or during vacations. (Op–All)

X 07 10.57 *Postschool Performance*—The general nature and, in some instances, quality of participation and accomplishments of former pupils (both graduates and dropouts) in employment and other activities after leaving school. (Op–All)

X 07 10.58 *Mobility/Stability*—The general extent and nature of pupil mobility and stability as indicated by computations such as the frequency with which pupils transfer into and out of the school system and its various schools, withdrawal rates according to type of withdrawal,[15] and a distribution of high school seniors according to the number of years in their school system and school. (Op–All)

X 07 10.59 *Pupil Needs*—Identified general needs of the pupils of the school(s) which might provide a basis for educational planning. Among these are personal needs (e.g. for peer acceptance and for feelings of success) and needs for remediation of specific deficiencies, various types of guidance, appropriate socialization experiences, and assistance with language problems. Such needs might be extended to include consideration of needs for community recreational organizations and facilities, and greater selection in educational offerings. (Op–All)

X 07 10.61 *Pupil Morale*—The characteristic collective feelings and attitudes of the pupils which are indicative of, and conducive to, willing and dependable performance and steady self-control. (Op–All)

---

[15] Items of information describing withdrawals are included in John F. Putnam and George G. Tankard, Jr., *op. cit.*, pp. 51–56.

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

X 07 10.62 *Pupil-staff Relations*—The nature of the typical relations between pupils and staff members, e.g., friendly, antagonistic, and supportive. (Op–All)

X 07 10.69 *Other Characteristics and Needs*—Identified general characteristics and needs of pupils, other than those included under items X0710.51 to X0710.62, which provide, or might provide, a basis for educational planning, e.g., environmental factors, and racial or ethnic composition. (Op–All) Any such characteristic or need should be specified.

X 07 10.70 *Provisions for Curriculum Improvement*—Activities having as their purpose the development or improvement of the curriculum including the programs of studies, cocurricular activities, and instructional services of the school system or school. (Rec–All) Curriculum improvement activities are discussed in greater detail on page 71 in the introduction to the X0700 Series. Items of information describing selected curriculum improvement activities are included under items X0720 through X0780.

X 07 10.80 *Provisions for Improving Teaching*—Activities such as supervision, workshops, conferences, school visits, committee projects, research projects, and staff meetings which are conducted during a given period of time to improve teaching. (Rec–All) Items of information describing selected activities for improving instruction are included under items X3235 and X3236.

X 07 10.90 *Other Background Considerations*—Factors other than those included under items X0710.11 to X0710.80 which are considered in the evaluation process because they are descriptive of the community, the neighborhood, the pupils, and other underlying determinants of the design of the curriculum. (Op–All) Any such factor or consideration should be specified.

X 07 20. ORGANIZATION FOR EVALUATION AND/OR CURRICULUM IMPROVEMENT (1, 2, 4)

The function and/or composition of groups organized for purposes of evaluation and/or curriculum improvement for the school system, a portion of the school system larger than a school, or a single school. (Op–All) The various people involved in any such group may be identified under item X0730. When a school system regularly provides services to assist staff members in the evaluation of school practices, these services may be identified in item X3240.20.

X 07 20.10 *Administrative Activity*—A specified activity—e.g., policy formulation, test selection, interpretation of findings—which is the responsibility of the chief executive officer of the school system and his immediate assistants or advisors. (Op–All)

X 07 20.20 *Advisory Committee*—A group of persons—from inside or outside the education profession—chosen to advise the school system's chief executive officer or other professional staff member regarding selected aspects of the school system's activities, and having no final decision-making powers. (Op–All)

X 07 20.30 *Steering Committee*—A group of persons generally representative of the various interests involved and responsible for the overall determination and, sometimes, for the implementation of policies in regard to an activity or project that is to be undertaken. (Op–All)

X 07 20.40 *Production Committee*—A group of persons responsible for the development and production of specific materials such as curriculum guides, outlines, lists, and other resource materials. (Op–All)

X 07 20.50 *Workshop*—As used in this context, an activity sponsored by a school system or school in which teachers, supervisors, administrators and, sometimes, consultants seek to evaluate and improve an aspect of curriculum and instruction. (Op–All)

X 07 20.90 *Other Organization*—An arrangement, for one or more persons, other than those arrangements identified under items X 0720.10 to X 0720.50, established for purposes of evaluation and/or improvement of aspects of the curriculum and instruction of the school system, or school. (Op–All) This might include classroom teachers working as individuals and combinations of classroom teachers cooperating in team teaching. Any such organization should be specified.

X 07 30. PERSONS OR GROUPS INVOLVED IN EVALUATION AND/OR CURRICULUM IMPROVEMENT (1, 2)

Identification of the persons or groups taking part in the evaluation and/or improvement of an aspect of the instructional program of the entire school system, of a portion larger than a school, or a single school, e.g., individuals or groups representing the administrative or instructional staff, the State education agency, a regional accrediting association, and a consultant or consulting firm. (Op–All)

X 07 30.10 *Board of Education*—The elected or appointed body which has been vested with responsibilities for authorizing, financing, and evaluating the educational activities in a given school system, school, or geographic area. (Op–All) Such bodies sometimes are known by terms such as school boards, governing boards, boards of directors, school committees, and school trustees. (NOTE: This definition relates to the general term and encompasses the boards of public and nonpublic institutions and school systems, including State boards of education and boards of intermediate and local basic administrative units.)

X 07 30.20 *Central Administrative Staff*—Staff members generally performing activities having as their purpose the general regulation, direction, and control of the affairs of the school system that are systemwide and not confined to a narrow phase of school activity, including the chief executive officer and his immediate assistants and advisors. (Op–All)

X 07 30.31 *Central Instructional Staff*—Central staff members, other than members of the central administrative staff identified under item X0730.20, generally performing activities dealing with curriculum improvement and with improving the quality of instruction. (Op–All) This includes supervisors, coordinators, and consultants serving the entire school system or a portion of the school system larger than a single school.

X 07 30.32 *School Instructional Staff*—School staff members generally performing activities dealing with the teaching of pupils or with improving the quality of teaching. (Op–All) This includes teachers, department heads, school librarians, audiovisual personnel, guidance personnel, and psychological personnel generally serving a single school. This also includes the instructional supervision function of school principals.

X 07 30.41 *Intermediate Administrative Unit*—Staff members of an administrative unit smaller than the State which exists primarily to provide con-

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

sultative, advisory, administrative, or statistical services to local basic administrative units, or to exercise certain regulatory and inspectoral functions over local basic administrative units. (Op–All)

X 07 30.42 *State Education Agency*—Staff members of an organization established by State law to carry out specified educational responsibilities of the State. (Op–All)

X 07 30.43 *Regional Accrediting Association*—Representatives of an organization established to administer an accrediting procedure in a geographical area including several States but not the entire nation. (Op–All)

X 07 30.44 *Educators' Organization*—Representatives of an organization of educators that draws its membership from the local area, State, or Nation as a whole. (Op–All)

X 07 30.50 *Consultants*—One or more persons without administrative authority whose advice is sought in improving policies and procedures such as those related to aspects of curriculum and instruction or those related to the administration of the school system and/or individual schools. (Op–All) This includes individuals or teams from colleges, universities, and consultant firms. Depending on the nature of his activity, such a person frequently is referred to as a "curriculum consultant" or a "management consultant."

X 07 30.60 *Parents and/or Guardians*—Persons having direct responsibility for children attending the schools of the school system. (Op–All)

X 07 30.70 *Representatives of Community*—Persons representing one or more aspects of community activity, e.g., business, labor, industry, religion, education, social service agencies, youth serving agencies, and other civic organizations. (Op–All)

X 07 30.80 *Pupils*—Individuals for whom instruction is provided in an educational program under the jurisdiction of the school system. (Op–All)

X 07 30.90 *Other Persons or Groups*—Persons, other than those identified under items X0730.10 to X0730.80, who take part in the evaluation process. (Op–All) Any such persons and groups should be specified.

X 07 40. EVALUATION PROCEDURES (1, 2, 3, 4)

Information about the frequency, media, and findings of evaluation of a given aspect of the instructional program of the entire school system, a portion of the school system larger than a school, a single school, a program of studies, or a specific type of self-contained class, course, or cocurricular activity.

X 07 41. Frequency of Evaluation (1, 2)

The frequency with which an aspect of the instructional program is studied as a part of an evaluation procedure to determine status or performance, e.g., semiannually, annually, biennially, or as required for some special purpose. (Op–All) This frequency should be specified.

X 07 42. Data Collection Media (1, 2)

The medium or media utilized in gathering descriptive or quantitative data for use in evaluation, e.g., observation, standardized tests, survey instruments, and accreditation and/or approval criteria. (Op–All) These data may be used in determining, among other things, the extent to which predetermined objectives and purposes of the school system or school have been achieved, the extent to which given standards are met, and the comparison with previous performance or the performance of others.

X 07 42.10 *Observation* — Personal observation — informal and/or controlled—of conditions and activities (Op–All)

X 07 42.20 *Interview*—A planned consultation or face-to-face meeting between an evaluator and one or more individuals associated with aspects of the school system or community. (Op–All)

X 07 42.30 *Standardized Test*—A test composed of a systematic sampling of behavior, having data on reliability and validity, administered and scored according to specific instructions, and capable of being interpreted in terms of adequate norms. (Op–All) Additional information derived from the testing program of the schools of the school system, included under items X3223.10 and X3240.40, might be used for purposes of evaluation.

X 07 42.40 *Teacher-made Objective Test*—A test constructed by a member of the instructional staff which usually is based on multiple-choice, matching, or completion-type questions, and which may or may not have local norms. (Op–All)

X 07 42.50 *Survey Instrument*—A questionnaire, rating scale, or other printed form used in gathering information about the schools, the pupils, the community, or related factors including community opinion polls and followup studies of pupils who graduate, drop out, and transfer to other school systems. (Op–All)

X 07 42.60 *Cooperatively Developed Criteria*—Standards or norms developed by personnel representative of the entire school system or school as bases for quantitative and qualitative judgments. (Op–All) The application of these criteria might involve the use of other media included under items X0742.10 to X0742.90.

X 07 42.70 *Approval and/or Accreditation Criteria*—Standards or norms selected by an approval agency or accrediting association as bases for quantitative and qualitative judgments. (Op–All) The application of these criteria might involve the use of other media included under items X0742.10 to X0742.90.

X 07 42.90 *Other Data Collection Media*—Media, other than those identified under items X0742.10 to X0742.70, utilized by persons or groups in gathering descriptive and/or quantitative data for use in evaluation, e.g., a case study approach and a research-type study. (Op–All) Any such medium should be specified.

X 07 43. Use of Data Collection Findings (1, 2)

The manner in which findings resulting from the data collection procedures are utilized for purposes of evaluation, e.g., in comparison of current status or performance with (a) objectives, (b) standards or criteria, (c) previous status or performance and/or (d) current status or performance of one or more other comparable groups or units. (Op–All)

X 07 44. Interpretation of Outcomes (1, 2)

A statement of significant outcomes resulting from evaluation procedures, usually involving an amount of interpretation, including identified needs for strengthening or improving aspects of the instructional program. (Op–All)

X 07 50. ASPECTS OF THE INSTRUCTIONAL PROGRAM EVALUATED (1, 2, 3, 4)

An indication of aspects of the instructional program which are studied in any given evaluation activity. This includes aspects of the instructional program's background (see item X0710) and of the content, resources, and processes of instruction.

X 07 51. Instructional Content (1, 2)

A selection of factors, descriptive of instructional content, which are considered in the evaluation

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

process because they provide an indication of the appropriateness and adequacy of instructional offerings.

X 07 51.10 *Scope of Instructional Content*—The general range of instructional content provided pupils through self-contained classes, courses, and cocurricular activities. (Op–All) More specific information may be considered under item X0751.20, Subject-matter Areas and Courses, and item X0751.30, Cocurricular Activities.

X 07 51.20 *Subject-matter Areas and Courses*—The broad subject-matter areas and specific courses in which instruction is provided for pupils of the school system. (Op–All) Terminology and definitions appropriate for describing subject-matter areas and courses are included in chapters 5 and 6 of this handbook and in the 40000 Series of chapter 3.

X 07 51.30 *Cocurricular Activities*—The broad cocurricular activity areas and specific cocurricular activities provided for pupils of the school. (Op–All) Terminology and definitions appropriate for describing cocurricular activities are included in chapters 5 and 6 of this handbook and in the 40000 Series of chapter 3.

X 07 51.40 *Articulation of Elements of the Instructional Program*—The manner in which the classroom instruction, cocurricular activities, and instructional services of the school system are interrelated and interdependent, the aim being to facilitate the continuous and efficient educational progress of pupils (e.g., from one grade to the next, from elementary to secondary school, and from secondary school to college), to interrelate various areas of the curriculum (e.g., fine arts and language arts), and/or to interrelate the school's instructional program with the program of out-of-school educational institutions (e.g., the home, church, youth groups, and welfare agencies). (Op–All)

X 07 51.41 *Articulation Between Successive Schools*—(Op–All)

X 07 51.42 *Articulation Between Successive Years or Grades*—(Op–All)

X 07 51.43 *Articulation Among Curriculum Areas*—Including planning for correlation, integration, differentiation, sequential study, and balance. (Op–All)

X 07 51.44 *Articulation With Nonschool Educational Institutions*—(Op–All)

X 07 51.90 *Other Aspects of Instructional Content*—Factors, other than those included under items X0751.10 to X0751.44 which are considered in the evaluation process. (Op–All) Any such factor should be specified.

X 07 52. Instructional Resources (1, 2)

A selection of factors, descriptive of instructional resources, which are considered in the evaluation process.

X 07 52.10 *Instructional Staff*—Identified general characteristics of the instructional staff—and of the conditions under which it works—which are useful for purposes of administration and evaluation. (Rec–All) Among such characteristics are preparation, experience, certification status, assignments, and teaching load or pupil load.

X 07 52.11 *Preparation*—The distribution of teachers (and other members of the instructional staff) according to aspects of their professional preparation such as the number of college credits in various general academic areas and in courses of professional educational preparation. (Op–All) This may include consideration for quality of preparation, such as "class standing," "mark-point average," and recommendations.

X 07 52.12 *Experience*—The distribution of teachers (and other members of the instructional staff) according to aspects of their work experience such as the nature and duration of experience in the current school, in the school system, in education outside the school system, and outside the field of education. (Op–All)

X 07 52.13 *Certification Status*—The distribution of teachers (and other members of the instructional staff) according to aspects of their certification status, including an indication as to the extent to which they are working in the area for which they have been certificated. (Op–All)

X 07 52.14 *Minimum Qualifications for Employment*—The minimum requirements for employment in each type of instructional assignment, considering factors such as education (or other preparation) and experience. (Op–All)

X 07 52.15 *Nature of Assignments*—The various types of instructional staff assignments within the school or school system and the number of positions for each assignment. (Op–All) The appropriateness of the various types of assignments may be considered in light of program objectives.

X 07 52.16 *Numerical Adequacy of Staffing*—The numerical adequacy of staffing for each type of instructional staff assignment. (Op–All) This adequacy frequently is expressed as "teaching load" or "pupil load" as related to activities such as (a) direct pupil supervision, (b) responsibility for parent and/or pupil counseling, and (c) responsibility for preparation of materials and reports for counseling.

X 07 52.17 *Performance in Assignments*—The general effectiveness with which staff members perform their functions. (Op–All)

X 07 52.18 *Staff Morale*—The characteristic feelings and attitudes of members of the instructional staff as related to their duties, responsibilities, goals, supervisors, and fellow staff members. (Op–All)

X 07 52.19 *Other Characteristics of Staff*—General characteristics of the instructional staff, other than those identified under items X0752.11 to X0752.18, which are considered in the evaluation process. (Op–All) Any such general characteristic should be specified.

X 07 52.20 *Services Supporting Instruction*—The broad areas of services supporting instruction which are considered in the evaluation processes, e.g., resource services for pupils, pupil personnel services, and services for the instructional staff. (Rec–All) Among factors to be considered concerning each of these broad service areas are appropriateness, accessibility, adequacy, frequency of use, and effectiveness of management.

X 07 52.21 *Resource Services for Pupils*—Services such as school library services and audiovisual services which make instructional resources available directly to pupils. (Op–All) A more detailed description of aspects of resource services for pupils is included under item X3210.

X 07 52.22 *Pupil Personnel Services*—Services such as guidance services, health services, school psychological services, audiology services, speech pathology services, attendance serv-

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

ices, and school social work services which are concerned with the total welfare of pupils. (Op–All) A more detailed description of aspects of pupil personnel services is included under item X3220.

X 07 52.23 *Services for Instructional Staff*—Services such as library services, audiovisual services, instructional supervision services, and provisions for inservice education which provide materials, guidance, and other assistance to teachers and other members of the instructional staff. (Op–All) A more detailed description of aspects of services for the instructional staff is included under item X3230.

X 07 52.29 *Other Services*—Services, other than those included under items X0752.21 to X0752.23, which support instruction and are considered in the evaluation process, e.g., food services, pupil transportation services, community services, research services, and information services. (Op–All) Any such service should be specified.

X 07 52.30 *Administration*—The activities of directing and managing an operation—of the school system or school—related to instruction, curriculum improvement, and instructional services. (Rec–All)

X 07 52.31 *Numerical Adequacy of Administrative Staff*—The numerical adequacy of staffing for the administrative assignments of the school system or school. (Op–All)

X 07 52.32 *Scheduling of Pupils and Staff into Classes and Services*—The appropriateness of schedules developed in assigning pupils and staff members to classes and instructional services. (Op–All)

X 07 52.33 *Organization for Administration*—The manner in which the administrators, other staff members, and resources are organized for the administration of the school system or school, or of an instructional service provided by the system or school. (Op–All)

X 07 52.39 *Other Administrative Factors*—Administrative factors other than those included under items X0752.31 to X0752.33—e.g., effectiveness of administration—which are considered in the evaluation process. (Op–All) Any such factor should be specified.

X 07 52.40 *Facilities*—The appropriateness, quantities, adequacy, accessibility, and frequency of use of the various types of facilities, including built-in equipment. (Op–All) Descriptions of the various types of facilities are included in Handbook III[16] and under item X3500.

X 07 52.50 *Movable Equipment* — The appropriateness, quantities, adequacy, accessibility, and frequency of use of various types of portable equipment, including library books. (Op–All) Descriptions of various types of movable equipment are included under item X3600.

X 07 52.60 *Supplies*—The appropriateness, quantities, adequacy, accessibility, and frequency of use of the various types of supplies, including textbooks and films. (Op–All) Descriptions of various types of supplies are included under item X3600.

X 07 52.61 *Provisions for Textbooks for Pupils*—The appropriateness of provisions for textbooks for pupils, and the condition, quantities, and appropriateness of the textbooks themselves. (Op–All) Descriptions of several plans for providing textbooks are included under item X3213.

X 07 52.71 *Finances*—The sources of funds, extent of financial resources, amount and proportion of budget appropriations made for the instructional program (i.e., curriculum and instruction) as a whole and for various aspects of the instructional program, and the actual expenditures for the various budget items. (Op–All)

X 07 52.72 *Salaries and Salary Schedule*—The appropriateness and adequacy of the salary schedule for classroom teachers and for other categories of the instructional staff, and the distribution of each type of instructional personnel according to selected salary categories. (Op–All)

X 07 52.80 *Community Resources*—The facilities, agencies, businesses, and persons outside the schools in the community that may be used, or are used, by the schools for their educative values, e.g., theaters, parks, playgrounds, libraries, art galleries, museums, zoos, planetariums, botanic gardens, universities, churches, scouts and other youth groups, service clubs, social-service agencies, industries, and individuals, including representatives of various occupational groups, cultural groups, and civic organizations. (Op–All)

X 07 52.90 *Other Instructional Resources*—Instructional resources, other than those included under items X0752.10 to X0752.80, which are considered in the evaluation process. (Op–All) Any such resource should be specified.

X 07 53. Instructional Processes (1, 2)

A selection of factors, descriptive of instructional processes, which are considered in the evaluation process because they may be indicative of the appropriateness and adequacy of instruction.

X 07 53.10 *Medium of Instruction*—Any medium by which or through which the teacher communicates with his pupils, such as direct pupil-teacher interaction, television, radio, correspondence, and a self-teaching device or other independent study. (Op–All) For a more detailed description of various media of instruction, see item X4200, Medium of Instruction.

X 07 53.20 *Methods of Instruction*—The types of procedures utilized by the teacher and/or pupil in instruction, e.g., demonstration, discussion, experimentation, lecture, practice, problem solving, and seminar. (Op–All) For a more detailed description of various methods of instruction see item X4300, Methods of Instruction, and item X4400, Other Procedures for Instruction.

X 07 53.21 *Grouping Practices in Scheduling Classes*—The manner in which pupils of the school are grouped for purposes or scheduling into classes, e.g., grouping according to factors such as age, sex, ability, achievement, and program of studies. (Op–All) Other such factors are included under item X0900, Pupils Served, and item X1000, Entrance.

X 07 53.90 *Other Aspects of Instructional Processes*—Factors related to the instructional process, other than those included under items X0753.10 and X0753.20, which are considered in the evaluation process. (Op–All) Any such factor should be specified.

X 07 54. Factors Evaluated in Programs of Studies and in Self-contained Classes, Courses, and Cocurricular Activities. (2, 4)

Items under this heading may be used to indicate factors related to a program of studies, self-contained class, course, or cocurricular activity which are evaluated for the school system or school.

---

[16] Paul L. Reason and George G. Tankard, Jr., *op. cit.*

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

For example, an appropriate selection from the following items may help describe evaluation considerations for a school's science department, occupational program, social studies course, and marching band.

X 07 54.10 *Characteristics of Staff*—Characteristics of individual teachers, groups of teachers, and other members of the instructional staff, such as the number of teachers involved, their qualifications, and their class loads. (Op–All)

X 07 54.20 *Instructional Content*—The nature of subject matter and other aspects of instructional content, such as appropriateness for the pupils; planned instructional outcomes for pupils; articulation of content with other programs, courses, and activities; and articulation with out-of-school and/or postschool experiences of the pupils. (Op–All)

X 07 54.30 *Resource Utilization*—The utilization of instructional resources, including the appropriateness, adequacy, and frequency of use of facilities, equipment, supplies, instructional services, and community resources. (Op–All)

X 07 54.40 *Instructional Processes*—Aspects of instructional processes such as the nature, appropriateness, and variety of the media of instruction, methods of instruction, and teaching procedures. (Op–All) This includes planning considerations, evaluation procedures, and pupil participation in selecting, planning, conducting, and evaluating content and learning experiences.

X 07 54.90 *Other Factors*—Factors other than those identified under items X0754.10 to X0754.40 which are evaluated for a program of studies, self-contained class, course, or cocurricular activity. (Op–All) Any such factor should be specified.

X 07 55. Factors Evaluated in Instructional Services (1, 2)

Items under this heading may be used to indicate factors related primarily to an instructional service which is evaluated for a school system or school. For example, an appropriate selection from the following items may help describe evaluation considerations for guidance services, health services, and resource services for pupils.

X 07 55.10 *Characteristics of the Staff*—Characteristics of individual staff members and groups, such as number of staff members involved, their qualifications, their assignments, and their work loads. (Op–All)

X 07 55.20 *Nature of Service Provided*—The type of service provided; its appropriateness, availability, and adequacy; and its articulation with other aspects of the instructional program and with out-of-school and/or post-school experiences of the pupils. (Op–All)

X 07 55.30 *Resource Utilization*—The utilization of resources, including the appropriateness, adequacy, and frequency of use of facilities, equipment, supplies, community resources, and related instructional services. (Op–All)

X 07 55.90 *Other Factors*—Factors other than those identified under items X0755.10 to X0755.30 which are evaluated for an instructional service provided by the school system or school. (Op–All) Any such factor should be specified.

X 07 60. CURRICULUM IMPROVEMENT ACTIVITY (1, 2, 3)

The nature of responsibilities and activities of individuals and groups in the improvement of curriculum and instruction, e.g., planning, inservice education, supervision, and developing guides and other reproduced materials. (Op–All)

X 07 60.10 *Planning for Curriculum Improvement*—Making plans for improving the curriculum, including the identification of major concerns or areas for intensive study. (Op–All)

X 07 60.20 *Development of Guide in Subject-matter Areas*—The development or refinement of materials concerned primarily with one or more subject-matter areas. (Op–All) Additional detail is included under item X0770.

X 07 60.30 *Development of Other Reproduced Materials*—The development or refinement of materials concerned primarily with content which is not subject-matter oriented, e.g., a policy statement, or a discussion of behavioral characteristics of children. (Op–All) Additional detail is included under item X0780.

X 07 60.40 *Inservice Education and Supervision*—(Op–All) Descriptions of aspects of inservice education and supervision are included under items X3235 and X3236.

X 07 60.50 *Encouragement of Innovation*—The manner in which school administrators and instructional supervisors encourage curricular innovation by individual teachers and groups of teachers by stimulating carefully planned experimentation in the use of new or unusual content, media, and methods of instruction. (Op–All)

X 07 60.90 *Other Activities*—Curriculum improvement activities other than those included under items X0760.10 to X0760.50. (Op–All) Any such activity should be specified.

X 07 70. SCOPE OF CURRICULUM IMPROVEMENT ACTIVITY (1, 2)

The span of levels, grades, and years included in the curriculum improvement activity and the scope of the substantive content. (Op–All)

X 07 71. Span of Levels, Grades, and Years (1, 2)

Complete levels (e.g., elementary school or secondary school), segments of levels (e.g., primary level or junior high school), specific grades, and specific years included in the curriculum improvement activity. (Op–All)

X 07 71.10 *All Levels, Grades, and Years*—All the levels, grades, and years which are included in the school system or school, not including any instruction in an adult education program. (Op–All)

X 07 71.20 *Single School Level*—A complete school level, i.e., elementary school, middle school, secondary school, or junior college level. (Op–All) This school level should be specified.

X 07 71.30 *Major Segment of School Level*—A major segment of a school level, e.g., kindergarten, primary grades, intermediate elementary grades, upper elementary grades, and junior high school. (Op–All) Any such segment should be specified.

X 07 71.40 *Single Grade or Year, One Regular School Term*—A single grade or year encompassing an entire regular school term. (Op–All) The grade or year should be specified. For illustration, the recommended subject matter of a single area (e.g., chemistry) for a single grade (e.g., grade 10) might comprise a guide for the instruction of a given course.

X 07 71.50 *Single Grade or Year, Other Single Term*—A portion of a single grade or year encompassing an entire term other than a regular school term, e.g., a semester, a quarter, or a trimester. (Op–All) The grade or year and the term should be specified.

X 07 71.60 *Segment of Term*—A portion of a regular school term, semester, quarter, trimester, or other term. (Op–All) For illustration, the recommended subject matter of a single area (e.g.,

07 EVALUATION AND CURRICULUM IMPROVEMENT—Continued

chemistry) for a portion of a regular school term (e.g., 4 weeks) might comprise a guide for instruction of a given unit of instruction.

X 07 71.70 *Level or Years Preceding Those of School System* —(Op–All)

X 07 71.80 *Level or Years Following Those of School System* —(Op–All)

X 07 72. Scope of Content (1, 2)
The range or extent of the subject-matter area or areas, or other content with which the curriculum improvement activity is concerned. (Op–All) Descriptions of the various subject-matter areas are included in chapters 5 and 6; descriptions of curriculum improvement activities are included under item X0760.

X 07 72.10 *All Subject-matter Areas*—All the subject-matter areas generally included in the grades or years covered by the curriculum improvement activity. (Op–All)

X 07 72.20 *One or a Few Subject-matter Areas*—(Op–All) The area or areas should be specified.

X 07 72.30 *Content Which is Not Subject-matter Oriented*—E.g., information about behavioral growth and development, or about mental health. (Op–All) Any such content may be specified.

X 07 79. Other Aspects of Scope
Aspects of scope other than those aspects included under items X0771 and X0772. (Op–All) Any such aspects should be specified.

X 07 80. CONTENT OF REPRODUCED MATERIALS (1, 2)
The content of reproduced materials developed through curriculum improvement activities, e.g., statements of philosophy, policy, need, and/or aims and objectives; an outline of subject matter; lists, or descriptions of learning experiences, teaching procedures, resources for instructors and/or resources for pupils; and/or evaluation procedures. (Op–All)

X 07 80.01 *Statement of Philosophy*—(Op–All)
X 07 80.02 *Statement of Policy*—(Op–All)
X 07 80.03 *Statement of Need*—(Op–All)
X 07 80.04 *Statement of Aims and Objectives*—(Op–All)
X 07 80.05 *Outline of Subject Matter*—(Op–All)
X 07 80.06 *Outline or List of Learning Experiences*—(Op–All)
X 07 80.07 *Outline or List of Teaching Procedures*—(Op–All)
X 07 80.08 *List of Resources for Instructors*—(Op–All)
X 07 80.09 *List of Resources for Pupils*—(Op–All)
X 07 80.10 *Evaluation Procedures*—(Op–All)
X 07 80.99 *Other Content*—(Op–All) (Specify.)

X 07 90. OTHER ASPECTS OF EVALUATION AND CURRICULUM IMPROVEMENT (1, 2, 3, 4)
Aspects of evaluation and curriculum improvement other than those included under items X0710 to X0780 e.g., time of year, length of time, and time of day. (Op–All) Any such aspect should be specified.

EVALUATING AND REPORTING PUPIL PROGRESS (2, 3, 4, 5)

X 08 00 Series

Items of information under this heading may be used to describe aspects of the marking system and the manner in which pupil progress is reported to parents, guardians, and pupils, e.g., the unit of value, marking scale, number of reporting periods, and method of reporting.

X 08 10. UNIT OF VALUE (2, 3, 4, 5)
Items under this heading may be used to describe units of value awarded for the successful completion of certain courses, intended to indicate the quantity of course instruction in relation to the total requirements for a diploma, certificate, or degree. Included here are terminology used for units of value and time requirements (such as class periods and minutes per week and the number of weeks) for these units.

X 08 11. Terminology Used for Unit of Value (2, 3, 4, 5)
The terminology used in referring to units of value awarded for the successful completion of certain courses, e.g., unit, credit, semester credit hour, and quarter credit hour.

X 08 11.10 *Unit*—A term frequently used in referring to a given number of hours of classroom and laboratory work during each week of a school term or to the total number of hours for an entire term. One type of unit, referred to as a "Carnegie unit," represents a year's study in a given subject (of at least 120 sixty-minute hours or their equivalent). (Op–Sec)

X 08 11.20 *Credit*—A term having a similar meaning as "unit", defined in item X0811.10, sometimes used along with the term "unit" to represent a fraction or multiple of the "unit" value. (Op–Sec)

X 08 11.30 *Semester Credit Hour*—A term frequently used to indicate the number of hours (or equivalency) of instruction per week for a course during a school term of one semester. (Op–Sec, JrC, AdEd)

X 08 11.40 *Quarter Credit Hour*—A term frequently used to indicate the number of hours (or equivalency) of instruction per week for a course during a school term of one quarter. (Op–Sec, JrC, AdEd)

X 08 11.50 *Accomplishment Unit*—A measure of performance indicating the satisfactory completion of a predetermined task or unit of work. (Op–Sec, JrC)

X 08 11.90 *Other Term*—A term, other than those identified under items X0811.10 to X0811.50, used in referring to units of value awarded for the successful completion of certain courses. (Op–Sec, JrC, AdEd) Any such term should be specified.

X 08 12. Class Periods or Modules Per Week Per Unit of Value (2, 3, 4)
The number of uniform class periods or modules per week, including time in laboratory experience, generally required for awarding one unit of value for the successful completion of a course, e.g., 1 class period, 5 class periods, and 9 or 10 modules. (Rec–Sec, JrC; Op–AdEd)

X 08 12.01 *1 Class Period*
X 08 12.02 *2 or 3 Class Periods*
X 08 12.03 *4 Class Periods*
X 08 12.04 *5 Class Periods*
X 08 12.05 *6 or 7 Class Periods*
X 08 12.06 *8 or 9 Class Periods*
X 08 12.07 *10 to 13 Class Periods*
X 08 12.08 *14 to 16 Class Periods*
X 08 12.09 *17 Class Periods and Over*—(Specify.)
X 08 12.11 *8 or Fewer Modules*
X 08 12.12 *9 or 10 Modules*
X 08 12.13 *11 or 12 Modules*
X 08 12.14 *13 to 15 Modules*
X 08 12.15 *16 Modules*
X 08 12.16 *17 to 20 Modules*
X 08 12.17 *21 to 24 Modules*
X 08 12.18 *25 to 29 Modules*
X 08 12.19 *30 or More Modules*—(Specify.)

08 EVALUATING AND REPORTING PUPIL PROGRESS—Continued

X 08 13. Minutes Per Week Per Unit of Value (2, 3, 4)

The number of minutes of instruction per week, including time in laboratory experiences and excluding time for passing between classes, generally required for awarding one unit of value for the successful completion of a course. (Rec–Sec, JrC; Op–AdEd) (NOTE: For a more precise indication of minutes of instruction per week, reports may indicate the first 2 digits of 3 digit numbers representing 10-minute time intervals, e.g., "18" for "180" minutes, "22" for "225" minutes.)

X 08 13.01 *Less than 60 Minutes*—(Specify.)
X 08 13.02 *60 to 119 Minutes*
X 08 13.03 *120 to 179 Minutes*
X 08 13.04 *180 to 239 Minutes*
X 08 13.05 *240 to 299 Minutes*
X 08 13.06 *300 to 359 Minutes*
X 08 13.07 *360 to 479 Minutes*
X 08 13.08 *480 to 599 Minutes*
X 08 13.09 *600 Minutes and More*—(Specify.)

X 08 14. Portion of Regular School Term for Unit of Value (2, 3)

The portion of the regular school term, or its equivalent, during which the given number of class periods or minutes per week (indicated in items X0812 or X0813) generally are required for awarding one unit of value for the successful completion of a course, e.g., one regular school term, one-half of a regular school term, and one-third of a regular school term.

X 08 14.10 *One Regular School Term*—The school term which usually begins in the late summer or fall and ends in the spring. (Rec–Sec, JrC; Op–AdEd)

X 08 14.20 *One-half Regular School Term*—One-half of a regular school term, frequently referred to as a "semester." (Rec–Sec, JrC; Op–AdEd)

X 08 14.30 *One-third Regular School Term*—One-third of a regular school term, frequently referred to as a "quarter." (Rec–Sec, JrC; Op–AdEd)

X 08 14.90 *Other Portion of Regular School Term*—A portion of the school term other than those identified under items X0814.10 to X0814.30. (Rec–Sec, JrC; Op–AdEd) Any such portion should be specified.

X 08 15. Variations in Units of Value (2, 3, 4)

X 08 15.10 *Units of Value Do Not Vary*—(Op–Sec)

X 08 15.20 *Units of Value Vary Among Programs of Studies*—(Op–Sec) Variations in time elements may be specified with designations from item X0600.

X 08 15.30 *Units of Value Vary Among Courses*—(Op–Sec) Variations in time elements may be specified with designations from item X0600.

X 08 20. CREDIT OR NONCREDIT (4)

An indication as to whether units of value are or are not awarded to pupils for the successful completion of the work of a given course.

X 08 20.10 *Credit Awarded*—Units of value awarded to all or some of the pupils for the successful completion of the work of the course. An indication may be made, as appropriate, for the number of units of value, the terminology used, and the type of weighting if any, for units of value of the course. In a junior college, an indication may be made to show whether credit is awarded for completion of a general education program, occupational program, or transfer program, or a combination of these. (Op–Sec, JrC) For a description of units of value, see item X0810.

X 08 20.20 *Credit Not Awarded*—No units of value awarded for the successful completion of the work of the course. (Op–Sec, JrC)

X 08 30. MARKING SCALE (2, 3, 4)

The letters, numbers, words, percentages, or other symbols providing a measurement of pupil performance (achievement), proficiency, progress, effort, or citizenship.

X 08 30.10 *Letters*—E.g., A, B, C, D, F. (Op–All) If these letters are associated with standard words or phrases or with percentages, the relationships should be specified. Specify also if "pluses" (+) and/or "minuses" (–) are used with the letter marks.

X 08 30.20 *Numbers*—E.g., 4, 3, 2, 1, 0. (Op–All) If these numbers are associated with standard words or phrases or with percentages, the relationships should be specified.

X 08 30.30 *Two-word Scale*—E.g., pass or fail; satisfactory or unsatisfactory. (Op–All)

X 08 30.40 *Standard Words or Phrases*—E.g., excellent, above average, average, below average, failing, incomplete, needs improvement in . . . , according to predetermined wording and sequence. (Op–All)

X 08 30.50 *Percentages*—E.g., 95%, 87%, 70%. (Op–All)

X 08 30.60 *Descriptive Comments*—Phrases, sentences, and paragraphs, not according to predetermined wording and sequence. (Op–All)

X 08 30.90 *Other Scale*—A scale, other than those identified under items X0830.10 to X0830.60, which is used to provide a measurement of pupil achievement, proficiency, or progress. (Op–All) Any such scale should be described or specified.

X 08 40. MARK VALUE FOR COURSES (2, 3, 4, 5)

The scale of numerical equivalents for marks awarded, indicating performance in schoolwork and use in determining pupil mark-point averages, e.g., A=4, B=3, C=2, D=1. These numerical equivalents should be specified wherever appropriate. The specific numerical equivalents in pupil records may be referred to as "mark points." The computation of mark-point averages is described in item X0870.

X 08 40.10 *Mark Value Does Not Vary*—(Op–Sec)

X 08 40.20 *Mark Value Varies Among Programs of Studies* –(Op–Sec)

X 08 40.30 *Mark Value Varies Among Courses*—(Op–Sec)

X 08 40.40 *Mark Value Varies Among Sections of Courses*—E.g., according to level of difficulty. (Op–Sec)

X 08 50. NUMBER OF PUPIL REPORTS (2)

The number of times in a school term when members of the school staff report to parents routinely about pupil progress and performance. If required for some purpose, the number of days in each reporting period may be specified.

X 08 50.10 *For Regular School Term*—The number of pupil reports during the regular school term. (Op–Elem, Sec)

X 08 50.11 *1 Report*
X 08 50.12 *2 Reports*
X 08 50.13 *3 Reports*
X 08 50.14 *4 Reports*
X 08 50.15 *5 Reports*
X 08 50.16 *6 Reports*
X 08 50.18 *8 Reports*
X 08 50.17 *Other Number of Reports*—(Specify.)
X 08 50.19 *As Required*

X 08 50.20 *For Summer School Term*—The number of pupil reports during the summer school term. (Op–Elem, Sec) For designations, see item X0850.10.

08 EVALUATING AND REPORTING PUPIL PROGRESS—Continued

X 08 60. MEANS OF REPORTING (2, 3, 4, 5)
The means by which routine information about pupil achievement or progress is communicated to parents, e.g., by use of a report card, letter, or note, or by personal conference.

X 08 60.10 *Report Card*—The formal, written notification to parents and/or guardians reporting achievement or progress of a pupil in various aspects of the school's instructional program. (Op–Elem, Sec)

X 08 60.20 *Letter or Note*—An informal written letter or note used by members of the school staff to report routine information about the pupil. (Op–Elem, Sec)

X 08 60.30 *Parent Conference*—A meeting in which a school staff member and parents together discuss and evaluate the achievement and progress of the pupil and the suitability of the instructional program to the needs of the pupil. This may take place at the school or in the home. In some instances, the pupil and/or additional staff members may take part in the conference. (Op–Elem, Sec)

X 08 60.90 *Other Means of Reporting*—Means, other than those identified under items X0860.10 to X0860.30, by which routine information about pupil achievement or progress is communicated to parents, e.g., a telephone call for informal contact. (Op–Elem, Sec) Any such means should be specified.

X 08 70. MARK-POINT AVERAGE (2, 3)
A measure of average performance in all courses taken by a pupil during a marking period, school term, or year—or accumulated for several school terms or years—obtained by dividing total mark points by total courses or by hours of instruction per week. Included under this heading is information about the frequency and scope of mark-point averages.

X 08 71. Frequency of Computation—(Op–Sec) (2)
X 08 71.10 *Once in Regular School Term*
X 08 71.20 *Once in Subdivision of Regular School Term*—E.g., semester, quarter.
X 08 71.30 *Every Marking Period*
X 08 71.40 *Other Frequency*
X 08 71.90 *Mark-point Average Not Computed*
X 08 72. Courses Included in Mark-point Average (2, 3)
X 08 72.10 *Every Course*—(Op–Sec)
X 08 72.20 *Not Every Course*—Performance in certain courses is not included in mark-point averages. (Op–Sec) These courses may be specified.

X 08 80. HONOR ROLL (2)
A list of names published each marking period, term, or year indicating pupils who have achieved a set standard of performance in their schoolwork.

X 08 81. Frequency of Honor Roll—(Op–Sec)
X 08 81.10 *Once in Regular School Term*
X 08 81.20 *Once in Subdivision of Regular School Term*—E.g., semester, quarter
X 08 81.30 *Every Marking Period*
X 08 81.40 *Once Every Marking Period and Semester or Quarter*
X 08 81.80 *Other Frequency*
X 08 81.90 *Honor Roll Not Prepared*

PUPILS SERVED (2, 3, 4, 5)
X 09 00 Series

Items of information under this heading may be used to describe the number of pupils served and selected characteristics of pupil groups, e.g., sex, race, ethnic origin, religion, socioeconomic background, and handicaps. Many of these items have been drawn from Handbook V, *Pupil Accounting for Local and State School Systems.*[17]

X 09 10. NUMBER OF PUPILS SERVED (2, 3, 4, 5)

X 09 11. Fall Membership of School (2)
The number of full-time pupils in membership on or about October 1, or the nearest date thereto when the membership can be considered stabilized for the regular school term. (Rec–All)

X 09 12. Full-time Pupils(2, 3)
The number of pupils carrying a full course load, as determined by the State or local school system, as of a given date other than in the fall as included under item X0911. (Op–JrC, AdEd)

X 09 13. Part-time Pupils (2, 3)
The number of pupils carrying less than a full course load as determined by the State or the local school system. (Op–JrC, AdEd) Also included under this heading, as a separate record, is information about part-time pupils who may be participating in shared time programs with other schools where they are considered to be full-time pupils.

X 09 14. Full-time Equivalency of Pupils (2, 3)
The number of pupils carrying a full course load, as determined by the State or local school system, plus an appropriate fraction or decimal for each pupil carrying less than a full load. (Op–JrC, AdEd)

X 09 15. Number of Pupils in Self-contained Class, Course, or Section (4, 5)
The number of pupils in membership as of a given date, e.g., October 1 or the nearest date thereto when the membership can be considered stabilized for the school term. (Op–All)

X 09 20. BASIS FOR SELECTION OR GROUPING (2, 3, 4, 5)
The nature of distinctive pupil groups served by a self-contained class, course, or cocurricular activity, i.e., an unselected grouping of pupils, and pupils in a selected grouping such as the gifted and talented, the physically handicapped, and males only or females only.

X 09 20.10 *Unselected Grouping*—A grouping composed of the normal range of pupils in most of the schools, courses, or classes serving a given age group. (Rec–All) For certain purposes such a grouping may be referred to as a "heterogeneous grouping."

X 09 20.20 *Selected Grouping*—A grouping composed only of pupils having one or more specified characteristics such as the gifted and talented (see item X0960.10), underachieving pupils (see item X0950.20), slow learners (see item X0950.30), the mentally retarded (see item X0960.30), the physically handicapped (see item X0960.40), the socially and/or emotionally handicapped (see item X0960.50), the culturally disadvantaged (see item X0945.10), and males only or females only (see item X0930.) (Rec–All) These characteristics should be specified. When a selected grouping has a relatively high degree of similarity in regard to certain factors that affect learning, it may be referred to as a "homogeneous grouping."

X 09 30. SEX OF PUPILS (2, 3)
X 09 30.10 *Both Males and Females*

---

[17] John F. Putnam and George G. Tankard, Jr., *op. cit.*

09 PUPILS SERVED—Continued

X 09 30.11 *Coeducational*—A student body including boys and girls (or men and women) on the same campus, frequently in the same classes. (Rec–All)

X 09 30.12 *Coordinate*—A student body including boys and girls (or men and women), who attend separate classes, frequently in different buildings and/or on separate campuses. (Rec–All)

X 09 30.20 *Males Only*—(Rec–All)

X 09 30.30 *Females Only*—(Rec–All)

X 09 40. PUPIL BACKGROUND (2, 3, 4, 5)

Included under this heading are items of information descriptive of the pupils' backgrounds, e.g., race, ethnic origin, religion, socioeconomic background, and cultural handicaps. Other considerations are included under item X0710.30, Characteristics of the Community, and items X0710.50 to X0710.69, Characteristics and Needs of Pupils.

X 09 41. Race (2)

The racial origin of various pupil groups, according to State or local classification and definition, e.g., American Indian, Eskimo, and Negro. (Op–All)

X 09 42. Ethnic Origin (2)

The ethnic origin of various pupil groups, according to State or local classification and definition, e.g., Mexican-American, Japanese-American, and Puerto Rican-American. (Op–Elem, Sec, AdEd)

X 09 43. Religion (2)

The religious preference of various pupil groups, as indicated by the pupils or their families. (Op–All)

X 09 44. Socioeconomic Background (2)

The socioeconomic background of the student body, as indicated by factors such as the occupation and education of the parents of the pupils. (Op–Elem, Sec, AdEd)

X 09 45. Cultural Handicaps (3)

Deviations or deficiencies in cultural or environmental background that adversely affect school performance or learning. Pupils having such deviations or deficiencies may be identified with groups such as the culturally disadvantaged, non-English speaking, migrant children, and functionally illiterate.

X 09 45.10 *Culturally Disadvantaged*—Pupils whose cultural background is so different from that of most pupils that they have been identified by professionally qualified personnel as needing additional educational opportunities beyond those provided in the usual school program if they are to be educated to the level of their ability. Certain types of programs for culturally disadvantaged pupils are referred to as "compensatory education programs." (Rec–Elem, Sec, AdEd)

X 09 45.20 *Inability to Speak Language of Instruction*—Pupils whose lack of competence in the language of instruction is so great that they are unable to profit from the usual classroom instruction. (Rec–Elem, Sec, AdEd) The primary language spoken by the pupils, or the language customarily spoken in their residences, should be specified.

X 09 45.30 *Migrant Children*—Children whose parents are migrant workers.[18] (Rec–Elem, Sec) For school purposes, the term refers to such children within the age limits for which the local school district provides free public education.

X 09 45.40 *Functionally Illiterate*—Individuals who are unable to read, write, and compute sufficiently well to meet the requirements of adult life. (Rec-AdEd) This frequently is considered to include adults who have not gone beyond the eighth grade or who cannot read, write, and compute at or above an eighth grade level of performance. In the United States this term usually is applied also to foreign born adults having limited ability to use the English language.

X 09 45.90 *Other Cultural Handicaps*—Pupils identified by professionally qualified personnel as being culturally handicapped in a manner other than those identified under items X0945.10 to X0945.40, e.g., culturally different, parentally neglected, and economically disadvantaged. (Rec–Elem, Sec, AdEd)

X 09 49. Other Background Factors (2)

Factors descriptive of pupils' backgrounds other than those included under items X0941 to X0945. (Op–All) Any such factor should be specified.

X 09 50. PUPILS WITHIN THE NORMAL RANGE OF ABILITY AND PERFORMANCE (2, 3, 4, 5)

Included under this heading are items of information identifying those pupils generally considered to be within the normal range of ability and performance, including underachieving pupils and slow learners.

X 09 50.10 *Ungrouped Pupils Within the Normal Range*—The general type of pupils in most of the schools, courses, or classes serving pupils of a given age group. (Rec–All)

X 09 50.20 *Underachieving Pupils*—Pupils who score consistently and significantly below their expected performance levels on standardized achievement tests. (Rec–Elem, Sec) Their expected performance levels are determined by using scores on standardized tests of ability to predict performance on standardized tests of achievement.

X 09 50.30 *Slow Learners*—Pupils who display evidence of having difficulty in adjusting to the usual curriculum in academic areas, requiring modification of school offerings within the regular classroom in order to attain maximum growth and development. (Rec–Elem, Sec, AdEd; Op–JrC)

X 09 50.90 *Other Groups of Pupils Within the Normal Range of Ability and Performance*

X 09 50.91 *Prekindergarten Age*—(Op–Elem)

X 09 50.92 *Former Dropouts*—Pupils who have returned to school after dropping out; that is, pupils whose most recent formal education was in an elementary or secondary school and who withdrew from this school by dropping out. (Op–Sec, JrC, AdEd)

X 09 50.93 *Employed Youth Under Age 18*—Persons under 18 years of age who have not completed secondary school and who left full-time instruction to enter the labor force. (Op–Sec, AdEd)

X 09 50.94 *Pregnant Girls*—(Op–Sec, AdEd)

X 09 50.95 *Adult Age*—(Op–Sec, JrC, AdEd)

X 09 50.96 *Parents*—Parents of school children and children of preschool age. (Op–All)

X 09 50.99 *Other Characteristics*—Distinctive characteristics of pupils with the normal range of ability and performance and not identified elsewhere under the X0950 Series, e.g., pupils in a given program of studies, or refugees. (Op–All) Any such characteristic should be specified.

---

[18] A definition for "Migrant Worker" may be found in the glossary.

X 09 60. PUPILS OUTSIDE THE NORMAL RANGE OF ABILITY AND PERFORMANCE (2, 3, 4, 5)

Included under this heading are items of information identifying those pupils generally considered to be outside the normal range of ability and performance, including the gifted, talented, mentally retarded, physically handicapped, socially handicapped, and emotionally handicapped. Pupils who are culturally handicapped are identified under item X0945.

X 09 60.10 *Gifted and Talented*—Pupils identified by professionally qualified personnel as being mentally gifted[19] or talented[20] in areas such as the following: (Rec–All)

X 09 60.11 *In General Academic Work*—Including mathematics, science, social studies, reading, foreign languages, and other language arts. (Op–All)

X 09 60.12 *In Fine Arts Areas*—Including music, dance, arts of design, and dramatics. (Op–All)

X 09 60.13 *In Vocational and Technical Areas*—(Op–All)

X 09 60.19 *In Other Areas*—Including athletics, human relationships, and creativity in areas not identified above. (Op–All)

X 09 60.30 *Mentally Retarded*—Pupils identified by professionally qualified personnel as being mentally retarded, according to degree of retardation. This includes those individuals whose level of mental development is such that they have been identified as unable, without special help, to profit from the usual school program. Children in this category are classified educationally as *educable* mentally retarded, *trainable* mentally retarded, and *severely* mentally retarded.

X 09 60.31 *Educable Mentally Retarded*—Mentally retarded individuals who are educable in the academic, social, and occupational areas, even though moderate supervision may be necessary. (Rec–Elem, Sec; Op–AdEd)

X 09 60.32 *Trainable Mentally Retarded*—Mentally retarded individuals for whom little or no self-support is anticipated, although some improvement in performance is possible, especially in self-care, social and emotional adjustment, and economic usefulness in the home or a sheltered environment. (Rec–Elem, Sec; Op–AdEd) These individuals probably will require a sheltered environment and major supervision throughout their lives.

X 09 60.33 *Severely Mentally Retarded*—Mentally retarded individuals for whom neither self-support nor significant improvement in performance is anticipated. (Rec–Elem)

X 09 60.40 *Physically Handicapped*—Pupils identified by professionally qualified personnel as having one or more physical handicaps, e.g., the blind, the hard of hearing, the speech impaired, and the crippled.

X 09 60.41 *Blind*—(Rec–All)

X 09 60.42 *Partially Seeing*—(Rec–All)

X 09 60.43 *Deaf*—(Rec–All)

X 09 60.44 *Hard of Hearing*—(Rec–All)

X 09 60.45 *Speech Impaired*—Individuals having unusual difficulty in oral communication. (Rec–All)

X 09 60.46 *Crippled*—Individuals with a physical impairment of a type which might restrict normal opportunity for education or self-support. (Rec–All) This term is generally considered to include individuals having impairments caused by a congenital anomaly (e.g., cleft palate, clubfoot, absence of some member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, encephalitis and other neurological involvements which may result in conditions such as cerebral palsy or epilepsy, etc.), and impairments caused by accident (e.g., fractures or burns which cause contractures, etc.).

X 09 60.47 *Pupils with Special Physical Health Problems*—Pupils identified by professionally qualified personnel as having—either permanently or periodically—less than the usual amount of strength, energy, and endurance and hence may need appropriate modifications in their educational program. (Rec–All) Such a condition might result from chronic illness or environmental causes, e.g., diabetes, epilepsy, cardiac disease, and lead poisoning.

X 09 60.50 *Socially and/or Emotionally Handicapped*—Pupils identified by professionally qualified personnel as having a social and/or emotional handicap, e.g., emotionally disturbed and delinquency prone. Pupils having a cultural handicap are included under item X0945, Cultural Handicaps.

X 09 60.51 *Emotionally Disturbed*—Pupils identified by professionally qualified personnel as having an emotional handicap of such a nature and severity as to require one or more special services, whether or not such services are available. Such services include institutional care, other professional treatment or care, and instruction in special classes for exceptional pupils on a full-time or part-time basis. (Rec–Elem, Sec)

X 09 60.52 *Delinquency Prone*—Children and youth who have been identified by professionally qualified personnel as having a strong tendency toward committing acts which are classified as falling within patterns of delinquent behavior. (Rec–Elem, Sec)

X 09 60.59 *Other Social and/or Emotional Handicaps*—Pupils identified by professionally qualified personnel as being socially and/or emotionally handicapped in a manner other than those identified under items X0950.51 and X0950.52, e.g., children addicted to hallucinogens or other deviant drugs. (Rec–Elem, Sec) The nature of their handicap should be specified.

X 09 60.60 *Pupils with Learning Disabilities*—Pupils identified by professionally qualified personnel as having sharp deficits in one or a limited number of aspects of the cognitive processes (i.e., of the sensory, associative, and expressive processes) *and* marked underachievement when considering the general level or mode of their overall abilities. Many such pupils also are said to have "brain injury (Strauss syndrome)," "perceptual handicaps," or "minimal brain dysfunction." For reporting purposes, pupils with learning disabilities should be identified also according to other characteristics (as being within the normal range of pupils; as being gifted or talented; as being slow learners, mentally retarded, partially seeing, hard of hearing, or speech impaired; or as having other specified types of handicaps). In each case, the distinguishing features are (1) the sharp imbalance within the pupil's cognitive development and (2) a marked underachievement.

---

[19] As the term is used in this handbook, the "mentally gifted" include individuals whose level of mental development is so far advanced that they have been identified by professionally qualified personnel as needing additional educational opportunities beyond what is provided by the usual school program if they are to be educated to the level of their ability.

[20] As the term is used in this handbook, the "talented" include individuals identified by professionally qualified personnel as being *capable of high performance* in one or more areas of special competence. Among these areas of special competence are intellectual ability; creativity; leadership ability and social adeptness; and facility in the productive and performing arts.

09 PUPILS SERVED—Continued

X 09 60.90 *Other Groups of Pupils Outside the Normal Range of Ability and Performance*

X 09 60.91 *Multiple Handicapped*—Pupils having more than one handicap. (Rec–Elem, Sec; Op–JrC, AdEd) These pupils should be identified also according to the nature of each handicap as indicated elsewhere in the X0900 Series.

X 09 80.99 *Other Characteristics*—Distinctive characteristics of pupils outside the normal range of ability and performance not identified elsewhere under the X0960 Series. (Op–All) Any such characteristic should be specified.

X 09 70. INTRASCHOOL AND/OR INTERSCHOOL ACTIVITY (4)

An indication as to whether a cocurricular activity involves pupils of a single school or includes participation or competition among pupils of various schools.

X 09 70.10 *Intraschool Activity*—An activity involving pupils of one school only. (Op–Sec, JrC)

X 09 70.20 *Interschool Activity*—An activity involving participation or competition with pupils of other schools. (Op–Sec, JrC)

X 09 80. IDENTIFICATION OF PUPILS IN SECTION (5)

The name and pupil number of all pupils enrolled in a section.

X 09 81. Names of Pupils—(Rec–All)

X 09 82. Pupil Numbers—(Rec–All)

ENTRANCE (2, 3, 4, 5)
X 10 00 Series

Items of information under this heading may be used to indicate the requirements for entrance of pupils into a school, program of studies, self-contained class, course, or cocurricular activity; the condition under which a class or course is required or elective; and procedures utilized to help orient new pupils to the school or aspects of the school program.

X 10 10. REQUIREMENTS FOR ENTRANCE (2, 3, 4)

The legal and other requirements for entrance of pupils into a school, program of studies, self-contained class, course, cocurricular activity, or section, e.g., age, grade or year standing, achievement, recommendation, and location of residence.

X 10 10.01 *Location of Residence*—Residence within a given school attendance area. (Op–All) Any specific geographic area which is served by the school—and its physical relationship to other areas of the school district—should be described in the records of the school system and school.

X 10 10.02 *Course or Courses Previously Completed*—Successful completion of one or more specific courses, classes, or activities. (Op–Sec, JrC, AdEd) Any such prerequisite should be specified.

X 10 10.03 *Enrollment in Given Program of Studies*—(Op–Sec, JrC, AdEd) Any such program of studies, or type of program, should be specified.

X 10 10.04 *Achievement in Schoolwork*—The quality or achievement in general schoolwork or in specific portions of schoolwork, as indicated by performance in previous courses or classes. (Op–Sec, JrC, AdEd) Any relevant area of schoolwork and level of performance should be specified. Performance on an examination or standardized test is included under item X1110.16.

X 10 10.05 *Age*—A specified minimum and/or maximum age of pupils. (Op–All) Designations are included under item X0310.

X 10 10.06 *Court Commitment*—Commitment or assignment by a judge or court of law, including but not limited to a school located in a correctional institution or detention home. (Op–Elem, Sec, AdEd)

X 10 10.07 *Current Employment*—The nature of current employment, the course, class, or program of studies being available only to currently employed pupils to upgrade or update their occupational skills and knowledge. (Op–AdEd)

X 10 10.08 *Employability*—Employability, the course, class, or program of studies being available only to pupils considered employable in the specific occupations or cluster of closely related occupations for which the course, class, or program provides preparation. (Op–Sec, AdEd)

X 10 10.09 *Grade or Year Standing*—A given grade or year standing of pupils within the school. (Op–Sec, JrC) This standing should be specified, using designations from items X0320 and X0330.

X 10 10.10 *No Requirement*—No entrance requirements exist, the course, class, program of studies, or activity being available to all pupils of the school. (Op–Sec, JrC, AdEd)

X 10 10.11 *Payment of Tuition and/or Fee*—(Rec–All)

X 10 10.12 *Recommendation of Psychologist*—(Rec–Elem, Sec)

X 10 10.13 *Recommendation of Teachers, Counselor, and/or Principal*—The recommendation of previous teachers, counselor, and/or principal. (Rec–Elem, Sec, JrC) Judgment as to employability should not be included here but, instead, should be included under item X1010.09.

X 10 10.14 *Special Pupil Ability, Aptitude, or Interest*—A special or specific minimum level of abilities, aptitudes, and interests, e.g., talent in dance, dramatics, and/or music. (Op–All) Any such requirement should be specified.

X 10 10.15 *Special Pupil Need*—(Rec–Elem, Sec) Any such need should be specified.

X 10 10.16 *Successful Completion of Entrance Examination or Other Test*—The successful completion of a standard entrance examination, achievement test, aptitude test, or other test, as required for all pupils or for specified groups of pupils. (Op–All) Details may be specified when reporting about this requirement.

X 10 10.99 *Other Requirements*—Requirements for entrance other than those identified under items X1010.01 to X1010.16, e.g., ancestry, occupation or employer of parents, previous attendance at an accredited school, and availability of transportation (including parental acceptance of responsibility of transportation). (Rec–Elem, Sec; Op–JrC, AdEd) Any such requirement should be specified.

X 10 20. REQUIRED OR ELECTIVE (4)

An indication as to whether a course or self-contained class is required or elective for all pupils of the school in completing their schoolwork or for certain groups or pupils.

X 10 20.10 *Required for All Pupils*—Required for all pupils of the school in completing their schoolwork. (Op–Sec, JrC)

X 10 20.20 *Required for Pupils in Specified Programs of Studies*—Not required of all pupils, but required for pupils in one or more types of programs of studies, as indicated below. These programs are described in the X0243 Series. For programs of occupational preparation, the area of occupational specialization should be specified.

X 10 20.31 *College Preparatory Program*—(Op–Sec)
X 10 20.41 *General Education Program*—(Op–Sec, JrC)
X 10 20.42 *Occupational Program*—(Op–Sec, JrC, AdEd)
X 10 20.51 *Transfer Program*—(Op–JrC)

10 ENTRANCE—Continued

X 10 20.59 *Other Program of Studies*—(Specify.) (Op–Sec, JrC, AdEd)

X 10 20.60 *Required for All Pupils in Area of Specialization within Program*—Not required of all pupils in a given type of program of studies, but required for pupils in a specific area of specialization within the program of studies, as this area is identified under items X2141, X2142, and X2144. (Op–Sec, JrC, AdEd)

X 10 20.70 *Elective for All Pupils*—Elective for all pupils in the school as a portion of the requirements for completing their schoolwork. (Op–Sec, JrC)

X 10 20.80 *Elective for Pupils in Specified Programs of Studies*—Available only to pupils in specified programs of studies, but on an elective basis. (Op–Sec, JrC, AdEd) For designations of programs of studies, see items X1020.20 or X0243.

X 10 30. ORIENTATION PRACTICES (2, 3)

Procedures for orienting new pupils into a school or program of studies, including informing pupils and parents about the facilities, personnel, rules, tradition, instructional offerings, and evaluation procedures. (Op–All) Such orientation may be provided prior to and/or shortly following the pupils' first days of membership.

PROGRESS AND PROMOTION PRACTICES (2)

X 11 00 Series

Items of information under this heading may be used to describe aspects of a school's promotion practices, e.g., the types of promotion, bases for promotion, and promotion period.

X 10 10. TYPE OF PROMOTION PRACTICE (2)

The types of promotion practices within the school, e.g., regular promotion, accelerated promotion, probationary promotion, and variable progress.

X 11 10.10 *Regular Promotion*—A promotion in a graded situation of a grade a year or of a half-grade a semester. (Op–Elem, Sec)

X 11 10.20 *Accelerated Promotion*—A promotion indicating progress which is more rapid than the usual practice; this may involve a "double promotion" (two grades' progress in one year) or some other arrangement for promoting a child at a rate more rapid than one grade per year. (Op–Elem)

X 11 10.30 *Continuous Promotion*—The practice of promoting pupils on the basis of chronological age. (Op–Elem)

X 11 10.40 *Nonpromotion*—The retaining of a pupil in his current grade at the end of the regular school term or at another time when most pupils are promoted. (Op–Elem)

X 11 10.50 *Probationary Promotion* — An arrangement whereby a pupil is promoted to the next higher grade on a trial basis in order that his progress and adjustment might be observed; if these prove satisfactory, the pupil is retained in the higher grade. (Op–Elem)

X 11 10.60 *Variable Progress*—The practice of grouping in which individual promotions are based on a number of factors including not only changes in chronological age, intellectual development, and achievement, but physical, social, and emotional factors as well. (Op–Elem, Sec) This involves reconstituting, at frequent intervals, small instructional groups within a class or larger group in order to provide for the uniqueness of each pupil in pattern and rate of development and learning.

X 11 10.90 *Other Type of Promotion*—A type of promotion other than those identified under items X1110.10 to X1110.60. (Op–Elem) Any such type of promotion should be specified.

X 11 20. BASES FOR PROMOTION (2)

Primary consideration of school staff members in determining whether or not pupils qualify for promotion, e.g., achievement, chronological age, and social maturity.

X 11 20.10 *Achievement*—Accomplishment or proficiency of performance in a given skill or body of knowledge. (Op–Elem, Sec)

X 11 20.20 *Chronological Age*—(Op–Elem, Sec)

X 11 20.30 *Intellectual Development*—The stage reached in the progressive growth and organization of mental functions and psychological behavior of the pupil. (Op–Elem, Sec)

X 11 20.40 *Social Maturity*—The stage reached in the progressive development of the pupil's attitudes, understandings, feelings, and skills with respect to social relationships and social institutions. (Op–Elem, Sec)

X 11 20.50 *Time in Class*—The amount of time that has elapsed since the pupil entered the class, or the equivalent of this amount of time. (Op–Elem, Sec)

X 11 20.90 *Other Basis*—A primary consideration, other than those identified under items X1120.10 to X1120.50, which helps school staff members determine whether or not pupils qualify for promotion, e.g., total development of pupils. (Op–Elem, Sec) Any such basis should be specified.

X 11 30. PROMOTION PERIOD (2)

The frequency, or regular time of year, at which promotions usually are made from one class, grade, or school to another, e.g., annual, semiannual, and flexible.

X 11 30.10 *Annual*—Promotions usually made once a year, generally at the close of the regular school term. (Op–Elem, Sec, JrC)

X 11 30.20 *Semiannual*—Promotions usually made twice a year, generally at the close of the first semester and at the close of the regular school term. (Op–Elem, Sec, JrC)

X 11 30.30 *Flexible*—Promotions made whenever pupils qualify for promotion. (Op–Elem, Sec)

X 11 30.90 *Other Period*—A frequency or time of year, other than those identified under items X1130.10 to X1130.30, when promotions usually are made from one class, grade, or school to another. (Op–Elem, Sec, JrC) Any such period should be specified.

COMPLETION PRACTICES (2, 3, 4, 5)

X 12 00 Series

Items of information under this heading may be used to describe aspects of the school's practices for graduation or promotion to another school in the school system, for successful completion of a course or class, and for terminating the membership of pupils.

X 12 10. REQUIREMENTS FOR SUCCESSFUL COMPLETION OR GRADUATION (2, 3, 4)

The minimum educational achievement or other qualifications for the successful completion of a program of studies, course, or class, e.g., general achievement in school work, successful completion of an equivalency examination, and successful completion of a given number of courses or of specified courses.

X 12 10.10 *Completion of a Minimum Number of Units of Value*—The successful completion of a given number of courses in a program of studies, as indicated by designations for units of value (such as units, credits, semester credit hours, and quarter credit hours). (Rec–Sec, JrC, AdEd) A description of units of value is included under item X0810.

X 12 10.11 *Total Number*—A specified minimum total number of units of value. (Op–Sec, JrC, AdEd)

X 12 10.12 *Number in Required Courses in Area of Major Specialization*—A specified number of units of value in specified required courses in the area of major specialization. (Op–Sec, JrC, AdEd)

X 12 10.13 *Number in Required Courses in Area of Minor Specialization*—A specified number of units of value in specified required courses in the area of minor specialization. (Op–Sec, JrC, AdEd)

X 12 10.14 *Number in Elective Courses*—A specified number of units of value in elective courses. (Op–Sec, JrC, AdEd)

X 12 10.15 *Noncredit Courses Required*—Courses required, if any, for which no units of value are awarded. (Op–Sec, JrC, AdEd)

X 12 10.20 *General Performance or Achievement in Schoolwork*—The attainment of a stated proficiency or the surpassing of a minimum level of general performance in a specified quantity of schoolwork or in specified areas of studies, as indicated by general performance or by achievement on comprehensive examinations in these areas of study. (Rec–Sec, JrC, AdEd)

X 12 10.30 *Equivalency Examination*—Satisfactory scores on an examination, approved by a State department of education or other authorized agency, intended to provide an appraisal of the pupil's ability or achievement in the subject areas regularly required for high school graduation. (Rec–Sec)

X 12 10.40 *Age*—Attainment of a specified age, resulting in termination of pupils' work in the program, course, or self-contained class. (Op–Elem, Sec)

X 12 10.50 *Duration of Time*—A specified number of years, semesters, weeks, days, or the like for pupils' work in the program, course, or self-contained class. (Op–Elem, Sec)

X 12 10.90 *Other Requirements*—Requirements for completion or graduation, other than those identified under items X1210.10 to X1210.50, e.g., a requirement for duration of time as a full-time pupil. (Rec–Sec, JrC, AdEd) Any such requirement should be specified.

X 12 20. RECOGNITION FOR COMPLETION (2, 3, 4)

The nature of the certificate or other recognition given pupils for successful completion of a program of studies, course, class, or cocurricular activity, or for graduation from a school, e.g., a diploma or other certificate, promotion to the next school, and awarding of units of value.

X 12 21. Recognition for Graduation or Completion of Program of Studies (2, 3)

The nature of the certificate or other recognition given pupils for the successful completion of the program of studies or for graduation, e.g., a diploma, an equivalency certificate, an associate degree, and promotion to the next school. Frequently, such recognition is bestowed at a formal graduation ceremony. It implies completion of the program of studies and indicates usually that pupils are prepared for a more advanced level of instruction.

X 12 21.10 *High School Diploma*—A formal document certifying the successful completion of a prescribed secondary school program of studies. In some States or communities, high school diplomas are differentiated by type such as an academic diploma, a general diploma, or a vocational diploma. (Rec–Sec, AdEd)

X 12 21.11 *Uniform High School Diploma*—A formal document certifying the completion of the prescribed work of a secondary school, without differentiation according to type of program. (Rec–Sec, AdEd)

X 12 21.12 *Differentiated High School Diplomas*—Formal documents certifying the completion of prescribed secondary school programs of studies, with a differentiation in type of diploma according to program, e.g., academic diploma, general diploma, and vocational diploma. (Rec–Sec, AdEd) Any such differentiated diploma may be specified.

X 12 21.20 *Certificate of High School Equivalency*—A formal document issued by a State department of education or other authorized agency certifying that an individual has met the State requirements for high school graduation equivalency by (a) attaining satisfactory scores on an approved examination or (b) earning the required number of credits in an organized program of approved instruction. (Rec–Sec, AdEd)

X 12 21.30 *Certificate of Completion*—A document certifying the satisfactory completion of a course or a program of studies. (Rec–All) This document frequently is awarded for courses for which credit toward graduation is not granted. This document sometimes is referred to as a "certificate of training."

X 12 21.40 *Certificate of Attendance*—A document certifying the presence of the pupil at school during given years or on given days. This document sometimes is awarded in lieu of a diploma or certificate of completion. (Rec–Sec, AdEd)

X 12 21.50 *Associate Degree*—A degree commonly conferred upon the successful completion of a 2-year program of studies of a junior college or technical institute. (Rec–JrC)

X 12 21.60 *Other Certificate or Degree*—A certificate or degree other than those identified under items X1321.10 to X1321.50. (Rec–Sec, JrC, AdEd) The nature of any such certificate or degree should be specified.

X 12 21.70 *Promotion to Next School*—The promotion of pupils to the next school—e.g., from an elementary school to a secondary school—without the awarding of a certificate. (Rec–Elem, Sec, JrC)

X 12 21.80 *No Recognition*—No recognition is given pupils for the successful completion of the work of the school or program of studies. (Rec–Elem, Sec, AdEd)

X 12 21.90 *Other Recognition*—Recognition, other than that indicated under items X1221.10 to X1221.70, given pupils for the successful completion of a program of studies. (Rec–All) The nature of any such recognition should be specified.

X 12 22. Recognition for Completion of Self-contained Class, Course, or Cocurricular Activity (4)

The nature of recognition given pupils for the successful completion of the work of a self-contained class, course, or cocurricular activity, e.g., awarding of units of value or a certificate, and no special recognition.

X 12 22.01 *Awarding of Units of Value*—The awarding of units of value, e.g., 1 unit, 1 credit, 3 semester credit hours, and 4 quarter credit hours. (Rec–Sec, JrC, AdEd) A description of units of value is included under item X0810.

X 12 22.02 *Completion of Requirement, But No Units of Value Awarded*—The successful completion of a requirement of a program of studies, without the awarding of any units of value. (Rec–Sec, JrC, AdEd)

X 12 22.03 *Certificate*—The awarding of a certificate of completion, certificate of attendance, certificate of participation, or other certificate. (Rec–Sec, JrC, AdEd)

X 12 22.04 *Honor Award*—An award in recognition of outstanding achievement, which may be instead of or in addition to other recognition as identified under items X1222.01 to X1222.03. (Rec–Sec, JrC, AdEd)

X 12 22.05 *Letter of Commendation*—The awarding of a written letter, usually prepared and signed by the principal of the school, commending the pupil for the nature of his participation in a cocurricular activity. (Op–Sec)

X 12 22.06 *Monogram*—The awarding of a school alphabetic letter or monogram in recognition of active participation or outstanding achievement in scholastic performance, service, or school or interschool activity. (Op–Sec, JrC)

X 12 22.07 *Points*—The awarding of "points" which may be applied, as units of value, toward the completion of requirements for a diploma or certificate. (Op–Sec, JrC)

X 12 22.08 *Promotion or Advancement*—The promotion of pupils to the next self-contained class or course in the sequence of classes or courses, without awarding units of value or a certificate; or advancement to a more advanced section of the same activity, or to a similar activity, requiring a greater degree of ability for successful participation. (Rec–All)

X 12 22.88 *No Special Recognition*—No special recognition is given pupils for the successful completion of the work of the self-contained class, course, or cocurricular activity. (Rec–Sec, JrC, AdEd)

X 12 22.99 *Other Recognition*—Recognition, other than that identified under items X1222.01 to X1222.08, given pupils for the successful completion of the work of the self-contained class, course, or cocurricular activity. (Op–Sec, JrC, AdEd) The nature of any such recognition should be specified.

X 12 30. OTHER TERMINATION PRACTICES (2, 3)

Items of information under this heading may be used to describe aspects of practices by which the school acts to terminate the membership of pupils who have not successfully completed the requirements of a program of studies; that is, the type of practice and reason for terminating membership. Reasons for dropping out may be found in Handbook V, *Pupil Accounting for Local and State School Systems*.[21]

X 12 31. Type of Practice (2)

The nature of practices by which the school may act to terminate the membership of pupils. Reasons for taking such action are included under item X1232, Reasons for Terminating Membership.

X 12 31.10 *Expulsion: Unsatisfactory Achievement*—The action, taken by school authorities, compelling a pupil to withdraw from school for reasons such as unsatisfactory achievement or progress in school work. (Op–Sec, JrC, AdEd)

X 12 31.20 *Expulsion: Unsatisfactory Behavior*—The action, taken by school authorities, compelling a pupil to withdraw from school for reasons such as extreme misbehavior and incorrigibility. (Op–Elem, Sec)

X 12 31.30 *Legal Exclusion*—The act of excluding children from school—i.e., not enrolling them—for legal reasons. A child of compulsory school attendance age who is not required to attend school for such a legal reason is referred to as an "exempted child." (Op–Elem, Sec)

X 12 31.40 *Probation*—The act of suspending disciplinary action, such as expulsion, pending satisfactory achievement or good behavior on the part of the pupil. (Op–Elem, Sec)

X 12 31.50 *Recommended Transfer or Other Withdrawal*—Recommendation by members of the school staff to parents of the pupil, or to his guardians or to the pupil himself, that the pupil transfer to another school or withdraw in some other manner from this school, with any subsequent action being taken by the pupil, parent, or guardian. (Op–Elem, Sec)

X 12 31.60 *Suspension*—Temporary dismissal of a pupil from school by duly authorized school personnel in accordance with established regulations. (Op–Elem, Sec)

X 12 31.90 *Other Practice*—Practices, other than those identified under items X1231.10 to X1231.60, by which the school acts to terminate the membership of pupils. (Op–Elem, Sec) Any such practice should be specified.

X 12 32. Reasons for Terminating Membership (2)

The reason for which the school acts to terminate the membership of pupils or refuses to enroll them.

X 12 32.10 *Underage*—The individual has not yet reached the minimum age at which children or youth are permitted to enter the school. (Op–Elem, Sec)

X 12 32.20 *Overage*—The individual has passed the maximum age at which children, youths, and adults are permitted to attend or enter the school. (Op–Elem, Sec)

X 12 32.30 *Behavioral Difficulty*—The individual displays behavior which prevents him or his classmates from making satisfactory educational progress. (Op–Elem, Sec)

X 12 32.40 *Mental Illness*—The individual has a diagnosed mental illness of such a nature that he cannot progress satisfactorily in available educational situations. (Op–Elem, Sec)

X 12 32.50 *Mental Retardation*—The individual has insufficient mental ability for successful participation in the educational program of the school. (Op–Elem, Sec)

X 12 32.60 *Physical Condition*—The individual has a physical condition—such as a communicable disease, a rheumatic heart, or a severe crippling condition—of such a nature that it seems impossible or unwise to participate in the educational program of the school. (Op–Elem, Sec)

X 12 32.90 *Other Reason*—Reasons, other than those identified under items X1232.10 to X1232.60, for which the school acts to terminate the membership of pupils or refuses to enroll them. (Op–Elem, Sec) Any such reason should be specified.

INSTRUCTION (1, 5)

X 13 00 Series

X 13 10. INSTRUCTION ON A SYSTEMWIDE BASIS (1)

In some instances, a program of studies, course, or cocurricular activity may be organized centrally to bring together qualified pupils from more than one school of the school system or to provide instruction from a central location through a medium such as educational television or a computer. (Rec) Examples of such instruction include a program for pupils who are gifted or talented in art, instruction in visual-motor coordination for perceptually handicapped children, a systemwide orchestra, instruction provided by the school system for home-bound children, and a special advanced placement mathematics course. To describe such situations, items of information may be drawn as appropriate from other portions of this handbook and included under this heading. Instruction provided jointly by more than one school system may be identified with designations under item X0250, Control. Instruction provided under contract may be identified with designations under item X0270, Contract for Instruction or Service.

---

[21] John F. Putnam and George G. Tankard, Jr., *op. cit.* pp. 54–56.

X 13 20. INSTRUCTION OF SECTION (5)
Information may be included under this heading to describe aspects of instruction which are unique to a given section, or which might distinguish the instruction of one section from other sections of the same self-contained class, course, or cocurricular activity. (Op–All) In addition, this section should be described as appropriate by other items which pertain, in general, to all sections of the self-contained class, course, or cocurricular activity.

SUBJECT MATTER (3, 4)
X 21 00 Series

Categories of information under this heading may be used for describing aspects of the subject matter of a self-contained class, course, or program of studies.

X 21 10. SUBJECT MATTER FOR SELF-CONTAINED CLASS (4)
Categories of information under this heading may be used for describing the general subject matter of all the schoolwork of the self-contained class or portions of the schoolwork.

X 21 11. Content for All Schoolwork (4)
The general subject matter for all the schoolwork of the class, e.g., general elementary education. (Rec–Elem, AdEd) An appropriate designation should be selected from the items presented in chapters 5 and 6.

X 21 12. Content for Portions of Schoolwork Within Self-contained Class (4)
The general subject matter for portions of the schoolwork within the self-contained class, e.g., social studies (or United States history and United States geography), and English language arts (or reading, spelling, grammar, and composition). (Op–Elem, AdEd) For purposes of a more complete description, such designations for each portion of work may be combined with other factors such as planned instructional outcomes for pupils, pupils served, time involved, and level of difficulty. In addition to the designations for subject matter (included in chapters 5 and 6), information might be included about the major resources or plans used in the instruction, e.g., a textbook and a State curriculum guide.

X 21 13. Content for Portions Outside Self-contained Class (4)
The general subject matter for portions of the schoolwork outside the self-contained class, e.g., music, physical education, and art. (Op–Elem, AdEd) For purposes of a more complete description, such designations for each portion of work may be combined with other factors such as planned instructional outcomes for pupils, pupils served, time involved, and level of difficulty. In addition to the designations for subject matter (included in chapters 5 and 6), information might be included about the major resources or plans used in the instruction, e.g., a textbook and a State curriculum guide.

X 21 20. SUBJECT MATTER FOR COURSE (4)
Categories of information under this heading may be used for describing the general subject matter for an entire course or for portions of the course.

X 21 21. Content for Entire Course (4)
The general subject matter for the entire course, as indicated by an appropriate designation selected from the items for subject matter presented in chapters 5 and 6, e.g., modern history or chemistry. (Rec–Sec, JrC, AdEd)

X 21 22. Content for Portions of Course (4)
The general subject matter for portions of the course or for units of subject matter, as indicated by appropriate designations selected from the items for subject matter presented in chapters 5 and 6, e.g., United States history, State history, and American Government. (Op–Sec, JrC, AdEd)

X 21 24. Major Resource or Plan (4)
The major resource or plan for the course, if any, around which the entire course or a major portion is organized, e.g., a specific textbook, a State curriculum guide, a local curriculum guide, the Madison Plan, the Biological Sciences Curriculum Study, and the Physical Science Study Committee. (Rec–Sec, JrC, AdEd) Any such resource or plan should be specified.

X 21 30. CONTENT OF COCURRICULAR ACTIVITY (4)
Categories of information under this heading may be used for describing the general content and experiences for an entire cocurricular activity or for portions of the cocurricular activity.

X 21 31. Content for Entire Activity (4)
The general content and experiences for the entire cocurricular activity, as indicated by an appropriate designation selected from the items for cocurricular activities presented in chapters 5 and 6, e.g., intramural athletics, Future Farmers of America, and School Safety Patrol. (Rec–Sec, JrC, AdEd)

X 21 32. Content for Portions of Activity (4)
The general instructional content for portions of the cocurricular activity as indicated by appropriate designations selected from the items for cocurricular activities presented in chapters 5 and 6, e.g., Girls Athletic Association, including activities of golf, softball, and tennis (Op–Sec, JrC, AdEd)

X 21 34. Major Resource or Plan (4)
The major resource, plan, or manual, if any, around which the entire cocurricular activity is organized, e.g., a local, State, or national resource guide for an organization such as the Future Homemakers of America, Future Teachers of America, or Future Farmers of America. (Op–Sec, JrC, AdEd) Any such resource plan or manual should be specified.

X 21 40. SPECIALIZATION (3)
In a program of studies, any area of major or minor specialization. In addition, for an occupational program of studies, an identification may be made of each type of occupational program and of the occupational goal of the pupils.

21 SUBJECT MATTER—Continued

X 21 41. Area(s) of Major Specialization (3)
Any broad subject-matter area in which pupils may specialize by taking a specified minimum number of courses and/or by earning a specified minimum number of units of value as a part of the requirements for completion of the program of studies. (Rec–JrC, AdEd; Op–Sec) Designations for subject-matter areas are included in chapters 5 and 6. If there is no area of major specialization in the program, this fact should be indicated.

X 21 42. Area(s) of Minor Specialization (3)
Any broad subject-matter area in which pupils may specialize by taking a specified minimum number of courses and/or by earning a specified minimum number of units of value, fewer than for major specialization, as a part of the requirements for completion of the program of studies. (Rec–JrC, AdEd; Op–Sec) Designations for subject-matter areas are included in chapters 5 and 6. If there is no area of minor specialization in the program, this fact should be indicated.

X 21 43. Type of Occupational Program of Studies (3)
The general nature of any program of studies that is designed primarily to prepare pupils for immediate employment or upgrading in an occupation or cluster of occupations, e.g., an occupational training program, technical program, and program for apprenticeship training. An occupational training program or retraining program may be identified also as a vocational program or technical program. Designations for occupational goals of pupils may be included under item X2144.

X 21 43.10 *Occupational Training Program*—A secondary school, junior college, or adult education program of studies designed primarily to prepare pupils for entrance into a specific occupation or cluster of occupations. This includes aspects of programs such as "vocational education," "cooperative on-the-job training". (Rec–Sec, JrC, AdEd) Occupational preparation under an apprenticeship program may be identified also under item X2143.40.

X 21 43.20 *Occupational Retraining Program*—An adult education program of studies designed primarily to upgrade employed workers in the specific vocation in which they are currently employed, or to retrain currently employed workers or unemployed workers for a new vocation. This includes aspects of programs such as "vocational education," "cooperative on-the-job training," and, "Manpower Development and Training."

X 21 43.21 *Upgrading in Current Occupation*—Supplementary training for extending or updating workers' skills and knowledge in the field in which they are currently employed. (Rec–AdEd)

X 21 43.22 *Retraining for New Occupation*—(Rec–AdEd)

X 21 43.30 *Vocational Program*—As used in this handbook, a program of studies designed primarily to prepare pupils for work in the occupational area between that of the unskilled employee and that of the technician. This includes programs of training and retraining. (Rec–Sec, JrC, AdEd)

X 21 43.40 *Technical Program*—A program of studies designed primarily to prepare pupils for work in the occupational area between that of the skilled employee and the professional employee such as the physician, engineer, and scientist. This includes programs of training and of retraining. (Rec–JrC, AdEd)

X 21 43.50 *Apprenticeship Program*—A program of studies of occupational preparation for skilled trades as authorized by State and Federal legislation and usually conducted under the auspices of a local joint apprenticeship committee representing labor, management, and the school (Rec–Sec, AdEd)

X 21 43.90 *Other Occupational Program*—A type of occupational program of studies other than those identified under items X2143.10 to X2194.50. (Rec–Sec, JrC, AdEd) Any such program should be specified.

X 21 44. Occupational Goal of Pupils (3)
The occupational objective of pupils in a given occupational program of studies—as included under item X2143—may be indicated by a designation from chapters 5 and 6 of this handbook or from the *Dictionary of Occupational Titles*[22] if and as appropriate. (Rec–Sec, AdEd) If applicable, information should be included about the type of certification or licensure awarded and the legal board or other group granting such certification or licensure.

X 21 50. COURSES OFFERED IN PROGRAM OF STUDIES (3)
In a departmentalized organization, a listing of courses offered in the program of studies, with an indication as to whether they are required or elective, their sequence, and their grade or year placement in the program. (Rec–Sec; Op–JrC, AdEd)

X 21 51. Required Courses
A listing of courses required in the program of studies, their sequence, and their grade or year placement. (Op–Sec, JrC, AdEd)

X 21 52. Elective Courses
A listing of elective courses and their grade or year placement. (Op–Sec, JrC, AdEd)

TREATMENT OF CONTENT (4)

X 22 00 Series

Items of information under this heading may be used to describe the manner in which the content is treated in a self-contained class, course, or cocurricular activity, e.g., introduction to area, study in depth, and survey of area.

X 22 00.01 *Introduction to Area*—Emphasis on introductory experiences and/or knowledge—and/or basic skills—in the subject-matter area. (Op–Sec, JrC, AdEd)

X 22 00.02 *Introduction to Research Methods in Area*—Emphasis on introductory experiences related to the principles and methods of research associated with the subject-matter area. (Op–Sec, JrC, AdEd)

X 22 00.03 *Practice, Application, or Content Enrichment*—Provision of opportunity for pupils to put to practice or extend the skills and knowledge acquired through their course work. (Op–All)

X 22 00.04 *Study in Depth*—Emphasis on advanced experiences and/or knowledge in the subject-matter area. (Op–Sec, JrC, AdEd)

X 22 00.05 *Survey of Area*—Emphasis on an organized overview of the most significant aspects of the subject-matter area. (Op–Sec, JrC, AdEd)

X 22 00.99 *Other Treatment*—A manner of content treatment other than those included under items X2200.01 to X2200.05. (Op–Sec, JrC, AdEd)

---

[22] U.S. Department of Labor. *Dictionary of Occupational Titles* (Third Edition). Washington: U.S. Government Printing Office, 1965.

PLANNED INSTRUCTIONAL OUTCOMES FOR PUPILS (3, 4, 5)

X 23 00 Series

Items of information under this heading may be used to identify general instructional outcomes for pupils for which provision is made in the instructional program, e.g., knowledge and understanding, appreciations and attitudes, skills, appropriately developed readiness, occupational competence, and improved physical fitness. These planned outcomes—reflecting anticipated growth or change in physical, intellectual, emotional, and social behavior or performance—frequently are referred to as "objectives." In specific instructional situations, it will be desirable to identify behavioral objectives sought which are more specific than the planned outcomes included under this heading.

X 23 00.01 *Acculturation*—Greater capability for pupils to understand and adapt to the cultural patterns of the various groups which comprise the community. (Op–All)

X 23 00.02 *Appreciations and Attitudes*—A greater awareness of the value and significance of aspects of the subject-matter area (including aesthetic appreciations), and a greater readiness to respond in a mature manner to phenomenons related to the area. (Op–All)

X 23 00.03 *Appropriate Behavior*—Patterns of acting contributing to constructive interaction with the broad range of cultural groups with which the pupil may be expected to be in contact now or in the future. This includes, in a more restricted sense, those patterns of acting which are consistent with the necessary norms and standards set to govern pupil behavior in the school. (Op–All)

X 23 00.04 *Career Guidance*—Greater understanding of one's educational and occupational strengths in relationship to career requirements and opportunities, which lead to the formulation of realistic plans for the immediate future and to consideration of the effects of technological change on the individual in the long-range future. (Op–Sec, JrC, AdEd)

X 23 00.05 *Citizenship Knowledge and Understanding*—Increased knowledge and appreciation of one's responsibilities and rights as a member of his school, community, State, nation, and world. (Op–All)

X 23 00.06 *Cognitive Thinking*—Greater skill in organizing and utilizing one's intellectual resources for arriving at the most appropriate solutions to problems. (Op–All)

X 23 00.07 *Creativity*—Enhanced performance in original and self-expressive behavior. (Op–All)

X 23 00.08 *Critical Judgment*—Greater ability to evaluate an idea, situation, or body of information in terms of meaningful objective and subjective criteria. (Op–All)

X 23 00.09 *Education for Leisure*—Interests and skills appropriate for pupils' leisure-time activities at the present time and in the future. (Op–All)

X 23 00.10 *Experience in Service to Others*—Greater familiarity with the satisfactions, rewards, and problems of providing service to others. (Op–All)

X 23 00.11 *General Development in Area*—General growth and development in the knowledge, understandings, appreciations, attitudes, and skills related to the subject-matter area. (Op–All) Emphasis on certain aspects of growth and development may be indicated under items such as those concerning knowledge and understanding in area (item X2300.13), understanding of basic principles (item X2300.31), historical awareness and/or background (X2300.12), appreciations and attitudes (item X2300.02), and skills associated with area (item X2300.27).

X 23 00.12 *Historical Awareness and/or Background*—Greater awareness of the nature, importance, and relationships of significant historical events affecting the subject-matter area. (Op–All)

X 23 00.13 *Knowledge and Understanding in Area*—Greater knowledge of the significant facts, and increased comprehension of the basic ideas associated with the subject-matter area. (Op–All)

X 23 00.14 *Leadership Ability*—Greater ability to serve effectively in leadership capacities in group activities. (Op–All)

X 23 00.15 *Literacy*—The ability to read, write, and compute at or above the minimum level of competence needed for meeting the requirements of adult life. (Op–All)

X 23 00.16 *Mental Health* — Improved soundness of mental health and overall personality development. (Op–All) Emphasis on certain aspects of mental health may be indicated under items such as those concerning self-understanding (item X2300.26), personal satisfaction (item X2300.20), and rehabilitation (item X2300.23).

X 23 00.17 *Moral and Ethical Values*—Greater adherence to the principles of morality and the ethics implicit in the highest American ideals. For nonpublic schools, there may be additional spiritual values sought as outcomes of instruction. (Op–All)

X 23 00.18 *Occupational Competence, Initial*—The skills, understandings, and appreciations needed for successful initial entry into a specific occupation or cluster of closely related occupations. (Op–Sec, JrC, AdEd)

X 23 00.19 *Occupational Competence, Upgraded or Updated*—The skills, understandings, and appreciations needed by workers already in an occupation to upgrade or update their occupational competence. (Op–AdEd)

X 23 00.20 *Personal Satisfaction*—A sense of reward and pleasure resulting from involvement in an activity and/or from enjoyment of the product or results of the activity. (Op–All)

X 23 00.21 *Physical Fitness and Health*—Improved soundness of physical health, muscular strength, physical endurance, kinesthetic skills, and resistance to disease. (Op–All)

X 23 00.22 *Readiness*—A willingness, desire, and ability to participate in activities related to the subject-matter area, depending upon the necessary level of pupils' physical, mental, and emotional maturation. (Op–All)

X 23 00.23 *Rehabilitation*—Restoration in whole or in part of the ability of a disabled individual to perform biologically, psychologically, or sociologically as one not disabled. (Op–Elem, Sec, AdEd) Items X2300.18 and X2300.19 may be used along with this item to indicate the development or restoration of occupational competence.

X 23 00.24 *Remediation*—Improvement or overcoming of any particular marked deficiency not due to inferior general ability, including a deficiency in content previously taught but not learned. When referring to the teaching of skills or other aspects of content for the first time

23 PLANNED INSTRUCTIONAL OUTCOMES FOR PUPILS—Continued

this may be referred to as "habilitation." In occupational programs this includes instruction intended to correct educational deficiencies or handicaps which might prevent pupils from benefiting from their occupational instruction. (Op–All)

X 23 00.25 *Safety Consciousness*—A knowledge and sense of patterns for safe living. (Op–All)

X 23 00.26 *Self-understanding*—Greater awareness and understanding of one's abilities, educational needs, emotions, interests, characteristic behavior patterns, ideal self, and self as perceived by others. (Op–All)

X 23 00.27 *Skills Associated With Area*—Greater ease and precision of physical and/or mental performance in activities related to the subject-matter area. (Op–All)

X 23 00.28 *Skills of Inquiry*—Greater ease and precision in the use of an appropriate systematic approach for seeking information related to the subject-matter area, including the use of observation, experimentation, and questioning. (Op–All)

X 23 00.29 *Social Adeptness*—Greater ease and skill in interpersonal relationships. (Op–All)

X 23 00.30 *Socialization*—Increased understanding and appreciation of the customs, standards, traditions, and values of various cultural groups—including the family, the school, and other groups within the community, nation and world—and active cooperation with these groups as appropriate. (Op–All) Emphasis on certain aspects of socialization may be indicated under items such as those concerning acculturation (item X2300.01), appropriate behavior (item X2300.03), social adeptness (item X2300.29), and leadership ability (item X2300.14)

X 23 00.31 *Understanding of Basic Principles*—An understanding of the basic principles underlying the subject-matter area. (Op–All)

X 23 00.99 *Other Planned Outcomes*—General outcomes for pupils, other than those included under items X2300.01 to X2300.31, which are expected to result from the instruction. (Op–All) Any such planned outcome should be specified.

STAFF MEMBERS (4, 5)

X 31 00 Series

Items of information may be included under this heading to identify and describe staff members involved in the instructional program. Items of information describing teachers and other staff members are included in Handbook IV, *Staff Accounting for Local and State School Systems*.[23] Team teaching arrangements may be identified by the use of item X 42 11.20 of this handbook, Team of Teachers. Cooperative arrangements between or among teachers also may be identified by the use of item X 41 10.20, Separate Subjects: Correlated Courses or Subject-Matter Areas.

X 31 10. **TEACHER OR OTHER STAFF MEMBER ASSIGNED (4, 5)**

The name and identification number of any teacher or other staff member assigned to a course, class, section, or service should be included under this heading. (Rec–All)

X 31 22. Teacher for portions of Schoolwork of Self-contained Class (4)

The nature of teacher assignments for given portions of the schoolwork of the self-contained class, e.g., the regular teacher of the self-contained class (teaching social studies), a teacher who is a specialist in a subject-matter area (teaching music, physical education or differentialized content for handicapped pupils), and both the regular teacher and a specialist (teaching art together).

X 31 22.10 *Teacher of Self-contained Class*—(Op–Elem)

X 31 22.20 *Specialist*—(Op–Elem)

X 31 22.30 *Both*—(Op–Elem)

X 31 22.90 *Other Teacher*—A teacher other than the regular teacher of the self-contained class and/or a teacher who is a subject-matter specialist. (Op–Elem) Any such teacher should be specified.

X 31 90. **OTHER INFORMATION ABOUT STAFF MEMBERS**

Information about staff members other than that included under items X3110 and X3122. (Op–All) Many appropriate items of information are included in Handbook IV, *Staff Accounting for Local and State School Systems*.[23]

SERVICES SUPPORTING INSTRUCTION (1, 2)

X 32 00 Series

Items of information under this heading may be used to describe aspects of services supporting instruction which are provided centrally or within a single school. The concept of "services provided centrally" includes situations in which staff members or pupils of various schools go to a central location to receive services and/or members of a central staff go to more than one location to provide services. Among services supporting instruction are resource services for pupils, pupil personnel services, services for the instructional staff, and community services. Though more than one service may be provided at a single location by an individual staff member, as in an "instructional materials center" or by a "counselor," each of the services provided should be identified separately. Special facilities, equipment, and supplies may be identified with the use of items in the X 35 00 Series and X 36 00 Series.

X 32 10. **RESOURCE SERVICES FOR PUPILS (1, 2)**

Items under this heading may be used to describe aspects of resource services provided for pupils, such as school library services, audiovisual services, and provisions for textbooks. School library services for members of the instructional staff are included under item X3231. Audiovisual services for staff members are included under item X3232.

X 32 11. School Library Services (1, 2)

School library services for pupils include activities such as selecting, acquiring, preparing, cataloging, and circulating books and other printed materials; planning the use of the library by pupils; and instructing pupils in their use of library books and materials, whether maintained separately or as a part of an instructional materials center. Included are facilities for the library materials center and its related work-study areas, related equipment and supplies, and services provided by school library personnel. (Rec–All) Among significant school library materials and services for pupils are the following:

---

[23] Allan R. Lichtenberger and Richard J. Penrod., *op. cit.*

31 STAFF MEMBERS—Continued

X 32 11.10 *Circulation Services*—E.g., circulation of books and periodicals. (Op–All)

X 32 11.30 *Individual Guidance in Selection of Books and Materials*[24]—(Op–All)

X 32 11.40 *Instruction in Use of Library*—(Op–All)

X 32 11.70 *Reference Materials*[24] *and Services*—E.g., encyclopedias, indexes, periodicals, newspapers. (Op–All)

X 32 11.80 *Selection, Acquisition, and Preparation of Materials*[24] *for use by Pupils*—Including classifying, cataloging, and processing of materials. (Op–All)

X 32 11.90 *Other School Library Services*—(Specify.) (Op–All)

X 32 12. Audiovisual Services (1, 2)

Audiovisual services for pupils include activities such as preparing, caring for, and making available to pupils instructional information through media such as films, filmstrips, transparencies, tapes, tv programs, and other similar materials, whether maintained separately or as a part of an instructional materials center. Included are facilities for the audiovisual center and related work-study areas, related equipment and supplies, and services provided by audiovisual personnel. (Rec–All) Among significant audiovisual services for pupils are the following:

X 32 12.10 *Circulation Services*—(Op–All)

X 32 12.30 *Individual Guidance in Selection and Use of Materials*[24]—(Op–All)

X 32 12.51 *Materials*[24] *and Services for Listening*—(Op–All)

X 32 12.52 *Materials*[24] *and Services for Viewing*—(Op–All)

X 32 12.60 *Production Services*—(Op–All)

X 32 12.80 *Selection, Acquisition, and Preparation of Materials*[24] *for Use by Pupils*—Including classifying, cataloging, and processing of materials. (Op–All)

X 32 12.90 *Other Audiovisual Services*—(Specify.) (Op–All)

X 32 13. Provisions for Textbooks (1, 2)

Included under this heading is a description of the plan by which the school or school system provides textbooks for the pupils, e.g., free loan plan, rental plan, and purchase plan. (Rec–All)

X 32 13.10 *Free Loan Plan*—Textbooks, owned by the school system or State, loaned to pupils without charge. (Op–All)

X 32 13.20 *Rental Plan*—Textbooks, owned by the school system, rented to pupils. (Op–All)

X 32 13.30 *Purchase Plan*—Textbooks made available through the school for purchase by pupils. (Op–All)

X 32 13.40 *Combination of Plans*—A combination of the plans identified under items X3213.10 to X3213.30, e.g., textbooks—purchased by many or most pupils—are provided on free loan to needy pupils.

X 32 13.90 *Other Plan*—A plan, other than those identified under items X3213.10 to X3213.30, by which the school or school system provides textbooks for pupils, e.g., the school sends lists of textbooks to private bookstores. (Op–All) Any such plan may be identified.

X 32 14. Provisions for Supplies (1, 2)

Included under this heading is a description of the plan by which the school or school system provides supplies other than textbooks (e.g., workbooks, notebooks, pencils) for all or a portion of the pupils. (Op–All) Any such plan should be specified.

X 32 19. Other Resource Services for Pupils (1, 2)

Resource services for pupils other than school library services, audiovisual services, and provision for textbooks and other supplies. (Op–All) Any such service should be specified.

X 32 20. PUPIL PERSONNEL SERVICES (1, 2)

Items under this heading may be used to describe aspects of pupil personnel services of the school or school system, such as guidance services, health services, psychological services, speech pathology and audiology services, and school attendance and social work or "visiting teacher" services.

X 32 21. Guidance Services (1, 2)

Guidance services for pupils include activities of counseling with pupils and parents, providing consultation with other staff members on learning problems, evaluating the abilities of pupils, assisting pupils to make their own educational and career plans and choices, assisting pupils in personal and social development, providing referral assistance, and working with other staff members in planning and conducting guidance programs for pupils. Included are facilities for guidance and counseling, related equipment and supplies, and services provided by guidance and counseling personnel. (Rec–All) Among significant guidance services provided for pupils are the following:

X 32 21.10 *Counseling with Pupils*—A process taking place when there is a relationship between one or more counselor(s) and one or more pupils as counselee(s) in which the pupil is helped to understand his educational, personal, and occupational strengths and limitations; relate his abilities, emotions, and aptitudes to educational and career opportunities; utilize his abilities in formulating realistic plans; and achieve satisfying personal and social development. (Rec–All)

X 32 21.11 *Educational Counseling*—A counseling process in which the pupil is assisted in planning and preparing for his immediate and future educational program. (Op–All)

X 32 21.12 *Career Counseling*—A counseling process in which the pupil is assisted in utilizing his aptitudes and abilities to develop realistic career plans. (Op–Sec, JrC, AdEd)

X 32 21.13 *Personal/Social Counseling*—A counseling process in which the pupil is helped to examine and explore matters of personal and/or social concern. (Op–All)

X 32 21.20 *Counseling with Parents*—A counseling process in which parents are helped to understand their children, to understand child-parent relationships, and to assist and plan with their children and teachers more effectively. (Rec–Elem, Sec, JrC; Op–AdEd)

X 32 21.30 *Consultant Service to Staff Members*—Services provided teachers and other staff members to enhance their knowledge and understanding of pupils and their effectiveness in working with pupils. (Rec–All)

X 32 21.31 *Assistance with Individual Pupils*—Services provided teachers and other staff members to assist them in their work with specific individual pupils. (Op–All)

X 32 21.32 *Inservice Education on Guidance Services*—Those formal activities organized for extending and broadening the knowledge, understanding, and skills of teachers and other staff members involved in aspects of the guidance services. This includes imparting information about guidance techniques and referral processes. (Op–All)

---

[24] Materials, considered to consist of equipment and supplies, may be described with items on pages 99 to 100.

32 SERVICES SUPPORTING INSTRUCTION —Continued

X 32 21.33 *Program Development for Guidance Services*—The planning and implementation of those activities, functions, and services in the guidance program which are considered necessary to meet the needs of pupils. (Op–All)

X 32 21.39 *Other Consultant Services*—Consultant services to staff members, concerning guidance and counseling, other than those identified under items X3221.31 to X3231.33. (Op–All) Any such service should be specified.

X 32 21.40 *Pupil Appraisal Services*—Those activities having as their purpose an assessment of pupil characteristics, which are used in administration, instruction, and guidance, and which assist the pupil in assessing his purposes and progress in career development and personality development. (Rec–All) Test records and materials used for pupil appraisal usually are included in each pupil's cumulative record.

X 32 21.50 *Information Services*—Activities organized for the dissemination of educational, occupational, and personal-social information to help acquaint pupils with the curriculum and with educational and vocational opportunities and requirements. Such information might be provided directly to pupils through activities such as group or individual guidance, or it might be provided indirectly to pupils, being distributed first to staff members or parents. (Rec–All)

X 32 21.51 *Educational Information*—Information, concerning immediate and future educational plans, provided pupils individually or in groups. (Op–All)

X 32 21.52 *Occupational Information*—Information, concerning immediate and long-range occupational plans, provided pupils individually or in groups. (Op–All)

X 32 21.53 *Personal and Social Information*—Information about personal and social concerns of pupils, provided to pupils individually or in groups. (Op–All)

X 32 21.60 *Maintenance and Interpretation of Cumulative Records of Individual Pupils*—Activities organized for the compilation, maintenance, and interpretation of cumulative records of individual pupils. (Rec–All) including systematic consideration of factors such as the following:

X 32 21.61 *Home and Family Background*—(Op–All)
X 32 21.62 *Physical and Medical Status*—(Op–All)
X 32 21.63 *Standardized Test Results*—(Op–All)
X 32 21.64 *Personal and Social Development*—(Op–All)
X 32 21.65 *School Performance*—(Op–All)
X 32 21.69 *Other Factors*—(Specify.) (Op–All)

X 32 21.70 *Placement Service*—Activities organized to help place pupils in appropriate educational situations while they are in school, in appropriate part-time employment while they are in school, and in appropriate educational and occupational situations after they leave school, and to facilitate pupils' transition from one educational experience to another. This may include, for example, admissions counseling, referral services, assistance with records, and followup communications with employers concerning the performance of former pupils.

X 32 21.71 *Educational Placement Service*—(Rec–Sec, JrC, AdEd)

X 32 21.72 *Occupational Placement Service*—(Rec–Sec, JrC, AdEd)

X 32 21.81 *Followup and Evaluation Services*—Activities organized to determine what is happening to pupils while they are in school and after they have left school (either as graduates or dropouts) so that the instructional program (including the guidance services) may be examined in terms of its appropriateness and its effect on the lives of pupils. (Rec–All)

X 32 21.82 *Financial Aid Services*—Activities intended to assist pupils in paying their educational expenses. Financial aid may take forms such as scholarships, fellowships, grants-in-aid, loans, employment, and cooperative housing. (Rec–Sec, JrC, AdEd)

X 32 21.91 *Referral for Additional Guidance Services*—Regularly established procedures intended to inform pupils about, and help them obtain, one or more aspects of guidance services which are not provided by the school or, in some instances, by the school system. (Rec–All)

X 32 21.99 *Other Guidance Services*—Guidance services other than those identified under items X3221.10 to X3221.91, e.g., guidance services associated with student activities and residence halls. (Rec–All) Any such service should be specified.

X 32 22. Health Services (1, 2)

Health services include the activities of providing medical, dental, psychiatric, and nurse services. (Rec–All) Among the possible health services provided for pupils are the following:

X 32 22.01 *Compilation, Maintenance, and Use of Pupil Health Records*—(Op–All)

X 32 22.10 *Health Appraisal*—Including: (Op–All)
X 32 22.11 *Vision Screening*
X 32 22.12 *Hearing Screening*
X 32 22.13 *Periodic Physical Examinations*
X 32 22.14 *Tuberculosis Testing*
X 32 22.19 *Other Screening nad Laboratory Testing Practices*—Exclusive of measurement of height and weight.

X 32 22.21 *Nurse Services*—(Op–All)

X 32 22.22 *Provision of Care of Emergency Illness and Injury*—(Op–All)

X 32 22.30 *Inservice Education on Health Services*—Those formal activities organized for extending and broadening the knowledge, understanding, and skills of teachers and other staff members involved in aspects of the health services. (Op–All)

X 32 22.40 *Health Counseling for Individual Pupils*—(Op–All)

X 32 22.50 *Communications to Parents about Health Problems of Pupils*—Followup of school-identified deficiencies or defects, and/or a program of education or information for parents about general pupil health. (Op–Elem, Sec, JrC)

X 32 22.60 *Dental Services*—(Op–All)
X 32 22.61 *Dental Screening*
X 32 22.62 *Dental Care*—E.g., cleaning, filling of cavities.
X 32 22.69 *Other Dental Services*—E.g., orthodontia.

X 32 22.70 *Psychiatric Services*—Including the activities of the psychiatrist and psychiatric social worker. (Op–All)

X 32 22.81 *Immunization Program*—One or more immunizations required and/or provided. (Op–All)

X 32 22.82 *Prevention and Control of Communicable Diseases*—Other than through the immunization program. (Op–All)

X 32 22.83 *Adjusting Programs to Health Needs of Individual Pupils*—(Op–All)

X 32 22.84 *Promoting a Healthful School Environment*—(Op–All)

X 32 22.85 *Food Program for Needy Children*—E.g., school breakfast program and school lunch program. (Op–Elem, Sec)

X 32 22.86 *Referral for Diagnosis or Treatment*—Regularly established procedures for informing pupils about, and helping them obtain, diagnosis or treatment not provided by the school or, in some instances by the school system. (Op–All)

X 32 22.90 *Other Health Services*—Health services for pupils other than those identified under items X3222.01 to X3222.86. (Op–All) Any such health service should be specified.

X 32 23. School Psychological Services (1, 2)

School psychological services include the activities of administering psychological tests, interpreting the results of psychological tests, working with other staff members in planning school programs to meet the special needs of pupils as indicated by psychological tests, and planning and managing a program of psychological services, including psychological counseling, for the school or school system. (Rec–All) Possible psychological services provided by the school for pupils include the following:

X 32 23.10 *Administering Psychological Tests*—Direction and management of psychological testing, including administration of standardized tests and inventories of ability, aptitude, achievement, interests, and personality. (Op–All)

X 32 23.20 *Interpreting Results of Psychological Testing*—Analyzing the results of group and/or individual psychological tests in order to interpret pupils' intellectual, emotional, and social development. (Op–All)

X 32 23.30 *Psychological Counseling*—A process that takes place when there is a relationship between a school psychologist or other qualified person as counselor and one or more pupils as counselees in which the pupils are helped to perceive, clarify, solve, and resolve problems of adjustment, interpersonal relationships, and the like. (Op–All)

X 32 23.40 *Psychotherapy*—A process that takes place when there is a therapeutic relationship—between a qualified mental health professional[25] and one or more pupils—in which the pupils are helped to perceive, clarify, solve, and resolve emotional problems or disorders. (Op–All)

X 32 23.50 *Working with Other Staff Members*—Collaborating with other school staff members in planning appropriate educational programs for individuals and groups of pupils and assisting them by providing relevant data about specific pupil problems of a psychological nature. (Op–All)

X 32 23.60 *Referral of Pupils for Further Clinical Diagnosis or Treatment*—Sending or directing pupils to other persons or agencies for further clinical diagnosis or treatment. (Op–All)

X 32 23.90 *Other Psychological Services*—Psychological services other than those identified under items X3223.10 to X3223.60. (Op–All) Any such service should be specified.

X 32 24. Speech Pathology and Audiology Services (1, 2)

Speech pathology and audiology services include those activities which have as their purpose the identification, assessment, and treatment of children with impairments in speech, hearing, and language. The two service areas are interrelated. (Op–All)

X 32 24.10 *Speech Pathology Services*—Activities organized for the identification of children with speech and language disorders, diagnosis and appraisal of specific speech and language disorders, referral for medical or other professional attention necessary to the habilitation of speech and language disorders, provision of required speech habilitation services, and counseling and guidance of children, parents, and teachers as appropriate to the habilitation of speech and language. (Op–All)

X 32 24.20 *Audiology Services*—Activities organized for the identification of children with hearing loss; determination of the range, nature, and degree of hearing function; referral for medical or other professional attention as appropriate to the habilitation of hearing; language habilitation; auditory training, speech reading (lip-reading), and speech conservation as necessary; creation and administration of programs of hearing conservation; and counseling and guidance of children, parents, and teachers as appropriate. (Op–All)

X 32 25. School Attendance and Social Work Services (1, 2)

School attendance and social work or "visiting teacher" services include those activities which have as their purpose the improvement of the attendance of pupils at school and the performance of school social work activities dealing with the problems of pupils which involve the home, school, and community. (Rec–All)

X 32 25.10 *Attendance Services*—Activities such as prompt identification of patterns of nonattendance, promotion of positive pupil and parental attitudes toward attendance, analysis of causes of nonattendance, early action on problems of nonattendance, and enforcement of compulsory attendance laws. (Rec–Elem, Sec) (See also Handbook IV, item 2103.01) [26]

X 32 25.20 *School Social Work Services*—Activities such as investigating and diagnosing pupil problems arising out of the home, school, or community; casework services for the child, parent, or both; interpreting the problems of pupils for other staff members; and promoting modification of the circumstances surrounding the individual pupil which are related to his problem insofar as the resources of the family, school, and community can be effectively brought to bear upon the problem. (Rec–All) (See also Handbook IV, item 2103.02.) [27]

X 32 29. Other Pupil Personnel Services (1, 2)

Pupil personnel services other than those identified under items X3221 to X3225. (Rec–All) Any such service should be specified.

X 32 30. SERVICES FOR INSTRUCTIONAL STAFF (1, 2)

Items under this heading may be used to describe aspects of services for the instructional staff which are provided for instructional staff members of the school or school system. Among these services are school library services, audiovisual services, instructional supervision services, and inservice education. School library services for pupils are included under item X3211. Audiovisual services for pupils are included under item X3212.

X 32 31. School Library Services (1, 2)

School library services for instructional staff members include activities such as selecting, acquiring, preparing, cataloging, and circulating books and other printed materials; planning the use of the library by teachers and other members of the instructional staff; and guiding instructional staff members in their use of library books and materials, whether maintained separately or as a part of an instructional materials center. (Rec–All) Included are facilities for the library materials center and the related work-study areas, related equipment and supplies, and services provided by school library personnel. Among significant school

---

[25] Qualified mental health professionals usually are considered to include psychiatrists, clinical psychologists, school psychologists, psychiatric social workers, and other professional persons serving with (or under the direction of) these mental health professionals as members of teams.

[26] Allan R. Lichtenberger and Richard J. Penrod. *op cit.* pp. 45–46.

[27] Ibid, p. 46

32 SERVICES SUPPORTING INSTRUCTION —Continued

library materials and services for instructional staff members are the following:

X 32 31.10 *Circulation Materials*[28] *and Services*—Including materials delivery service. (Op–All)

X 32 31.20 *Consultant Service to Instructional Staff*—(Op–All)

X 32 31.30 *Guidance in Selection of Books and Materials*[28]—(Op–All)

X 32 31.70 *Reference Materials*[28] *and Services*—(Op–All)

X 32 31.80 *Selection, Acquisition, and Preparation of Materials*[28] *for use by Instructional Staff*—Including classifying, cataloging, and processing of materials. (Op–All)

X 32 31.90 *Other Library Services*—(Specify.) (Op–All)

X 32 32. Audiovisual Services (1, 2)

Audiovisual services for instructional staff members include activities such as selecting, preparing, caring for, and making available to members of the instructional staff the equipment, films, filmstrips, transparencies, tapes, TV programs, and other similar materials, whether maintained separately or as a part of an instructional materials center. Included are facilities for the audiovisual center, TV studio, and related work-study areas, related equipment and supplies, and services provided by audiovisual personnel. (Rec–All) Among significant audiovisual services for instructional staff members are the following:

X 32 32.10 *Circulation Services*—Including materials delivery service. (Op–All)

X 32 32.20 *Consultant Service and Inservice Education for Instructional Staff*—(Op–All)

X 32 32.51 *Materials*[28] *and Services for Listening*—(Op–All)

X 32 32.52 *Materials*[28] *and Services for Viewing*—(Op–All)

X 32 32.60 *Production Services*—Including assistance in mounting pictures, preparing overhead transparencies, photo copying, preparing and duplicating tapes, and radio and television program production. (Op–All)

X 32 32.80 *Selection, Acquisition, and Preparation of Materials*[28] *for Use by Instructional Staff*—Including classifying, cataloging, and processing of materials. (Op–All)

X 32 32.90 *Other Audiovisual Services*—(Specify.) (Op–All)

X 32 33. Curriculum Laboratory (1, 2)

A curriculum laboratory is a facility where special assistance is provided to members of the instructional staff in planning and preparing for instruction. (Op–All) Among materials usually available in a curriculum laboratory for reference and use are representative textbooks, curriculum guides, tests, and selected audiovisual equipment and supplies.

X 32 34. Other Resource Services (1, 2)

Resource services—other than school library services, audiovisual services, and a curriculum laboratory—by which materials and supplies are made available or are provided for members of the instructional staff. (Op–All) Any such resource service should be specified.

X 32 35. Instructional Supervision Services (1, 2)

Instructional supervision services of the school or school system include the activities by which central administrative personnel, principals, and/or supervisory personnel provide personal leadership, guidance, and expertness to members of the instructional staff for the purpose of improving instruction. (Op–All) Among services provided for individuals or groups are assistance with planning, assistance in understanding pupils, assistance with development of skills and/or techniques of instruction, assistance with research activities, and direction of inservice education activities.

X 32 35.10 *Assistance with Planning*—(Op–All)

X 32 35.20 *Assistance in Understanding Pupils*—(Op–All)

X 32 35.30 *Assistance with Development of Skills and/or Techniques of Instruction*—(Op–All)

X 32 35.40 *Assistance with Evaluation*—(Op–All)

X 32 35.50 *Assistance with Research Activity*—(Op–All)

X 32 35.60 *Direction of Inservice Education Activity*—(Op–All) Inservice education activities are identified under item X3236.

X 32 35.90 *Other Supervision Services*—Instructional supervision services other than those identified under items X3235.10 to X3235.60 (Op–All) Any such service should be identified.

X 32 36. Provisions for Inservice Education (1, 2)

Inservice education for the instructional staff includes systematized activities promoted, directed, or approved by a school system or school that contribute to the professional or occupational growth and competence of members of the instructional staff during the time of their service to the school system or school. (Op–All) Among these activities are workshops, demonstrations, school visits, courses for college credit, sabbatical leaves, and travel leaves.

X 32 36.01 *Workshop*—An inservice education activity, with or without a set program, providing opportunity for teachers, supervisors, administrators and, sometimes, consultants to explore together various problems in curriculum and instruction. (Op–All) Frequently workshops include sessions for planning, working, summarizing, and evaluating.

X 32 36.02 *Institute*—An arrangement for lectures and discussion sessions on a limited subject or theme, usually more intensive than a conference but less elaborate than a workshop. (Op–All)

X 32 36.03 *Conference*—A meeting of a group of teachers, and/or administrators, often with a consultant specialist from outside the school system, to consider a predetermined subject related to the curriculum and instruction of the school system. (Op–All) When there is a maximum of individual participation in the exchange of ideas, such an activity might be referred to as a "seminar."

X 32 36.04 *Lecture*—An activity in which a member of the staff or a consultant gives an oral presentation of facts or principles related to curriculum and instruction. (Op–All) A lecture may or may not be followed by a period for questioning or discussion.

X 32 36.05 *Demonstration*—An activity in which one or more persons, in the role of a teacher, work with a group of pupils in the presence of other staff members to show the others how to use certain methods or techniques of instruction. (Op–All)

X 32 36.06 *Staff Meetings*—Meetings of the principal, teachers, other members of the instructional staff, and others to consider problems related to curriculum and instruction. (Op–All)

X 32 36.07 *Committee Project*—An activity carried on over a period of time by a group of teachers, supervisors, and/or administrators to investigate in depth and develop solutions for a significant problem related to curriculum and instruction. (Op–All)

X 32 36.08 *Group Study Activity*—An activity carried on over a period of time by a group of teachers,

---

[28] Materials, considered to consist of equipment and supplies, may be described with items on pp. 99 to 100.

32 SERVICES SUPPORTING INSTRUCTION —Continued

supervisors, and/or administrators to develop greater knowledge, understanding, and insights into particular problems related to curriculum and instruction; to develop a possible solution to the problems; and to implement and test the solutions. (Op–All)

X 32 36.09 *Helping-teacher Services*—An activity of one or more professional staff members directed primarily toward assisting various teachers in their classrooms to improve their teaching techniques. (Op–Elem, Sec)

X 32 36.10 *Television Program for Inservice Education*—An activity whereby television programs concerning some phase of inservice education are developed at a central location and transmitted by television to teachers in their various schools, usually prior to or following the usual period of daily instruction. (Op–Elem, Sec) If such an activity constitutes a course for college credit, it should be included under item X3236.13.

X 32 36.11 *School Visit*—An activity in which a teacher visits another school either on an informal basis or through a formally arranged plan to observe teaching methods and to discuss various aspects of instruction. (Op–Elem, Sec)

X 32 36.12 *Payment of Expenses to Professional Meetings*—Expenses paid (in full or in part) by the school system for attendance at workshops, institutes, conferences, and/or lectures not provided by the school system. (Op–All)

X 32 36.13 *College Course*—Instruction provided by a college or university in cooperation with the school system, so that college credit or credit toward a salary increment is awarded for the satisfactory completion of the work. (Op–All)

X 32 36.14 *Payment of Tuition*—Payment of college tuition and, possibly, other expenses for preparation resulting in certification or strengthening in an area of need to the school system. (Op–All)

X 32 36.15 *Sabbatical Leave*—A leave of absence with full or partial remuneration, following a designated number of consecutive years of service, providing members of the instructional staff with opportunity for self-improvement through activities such as graduate study, occupational experience or training, travel, writing, and recuperation. (Op–All)

X 32 36.16 *Leave Without Pay*—A leave of absence without remuneration. (Op–All)

X 32 36.90 *Other Provisions for Inservice Education*—Provisions for inservice education, other than those identified under items X3236.01 to X3236.16, which are provided for staff members of the school or school system, e.g., provisions for independent study. (Op–All) Any such provision should be specified.

X 32 39. Other Services for Instructional Staff (1, 2)

Services other than those identified under items X3231 to X3236 which are provided for members of the instructional staff e.g., health services, and services of nonprofessional and nonteaching staff members such as educational secretaries and teacher aides who assist with correspondence, recordkeeping, duplicating instructional materials, and other routine administrative activities. (Rec–All) Any such service should be specified.

X 32 40. RESEARCH AND STATISTICAL SERVICES (1, 2)

Items under this heading may be used to describe aspects of the research and statistical services of the school system or school. (Op–All)

X 32 40.10 *Research Services*—Activities organized to promote, facilitate, and conduct applied and/or basic research. (Op–All) Statistical services, which frequently support various research activities, are identified in item X3240.30; data processing services supporting research and statistical services are included in item X3250.

X 32 40.11 *Applied Research*—The type of research activity concerned with specific problems for which immediately applicable findings are sought. (Op–All) This activity may represent the application of knowledge derived from basic research or may involve testing alternative practices in the school system, school, or classroom. When brought to bear on problems of curriculum and instruction, this type of research is conducted to solve immediate practical problems related to the content, resources, and/or processes of instruction and learning. For administration and management, applied research might be used to help solve problems such as those associated with coordinated purchasing and warehousing, space utilization, maintenance schedules, transportation routes, and useful life of equipment.

X 32 40.12 *Basic Research*—The type of research activity, primarily directed to the development and evaluation of theory, in which immediate applicability of findings is not a major concern. (Op–All) This type of research activity is primarily concerned with the discovery of new knowledge.

X 32 40.20 *Evaluation Services*—Activities organized to assist staff members in planning for the evaluation of school practices with the purpose of improving the quality of such practices. (Op–All) Included are activities designed to plan for advancing the state of the art of evaluation, e.g., the development of models and instruments for evaluation purposes.

X 32 40.30 *Statistical Services*—Activities organized to assist staff members in the process of collecting, organizing, analyzing, and disseminating information about the educational system for purposes of comparison, determination of current status, and projection. (Op–All) This involves summarizing and analyzing information or data by hand methods, unit record equipment, electronic computers, and other means.

X 32 40.40 *Coordination of Information about Individual Schools*—Activities organized to assist the various schools of the system in collecting uniform information with accuracy; to gather information from the schools at a central location for processing, storage, and retrieval; to develop school and school system norms for standardized tests; and to transmit relevant processed information back to the various schools. (Op–All)

X 32 40.90 *Other Research and Statistical Services*—Research and statistical services, other than those identified under items X3240.10 to X3240.40, which are provided by the school or school system. (Op–All) Any such service should be specified.

X 32 50. DATA PROCESSING SERVICES (1, 2)

Activities organized to assist staff members through the systematic collecting, processing, and reporting of various kinds of educational information. (Op–All) These services include the utilization of data processing techniques and its related processes to facilitate a data system of information collection, storage, and retrieval. They provide a means for relieving staff members of routine duties, and they provide management with information on which to base administrative

32 SERVICES SUPPORTING INSTRUCTION —Continued

decisions. These services also stimulate and provide data basic to the ongoing processes of research and analysis (see also item X3240). Among data processing services are the following:

X 32 50.01 *Attendance Accounting*—(Op–All)
X 32 50.02 *Class Scheduling*—(Op–All)
X 32 50.03 *Preparing Class Lists*—(Op–All)
X 32 50.04 *Preparing Report Cards*—(Op–All)
X 32 50.05 *Test Scoring and Reporting*—(Op–All)
X 32 50.09 *Other Data Processing Services*—E.g., master scheduling, class ranking, and preparation of mailing lists. (Op–All) Any such service should be specified.

X 32 60. INFORMATION SERVICES (1, 2)

Activities organized to inform the public about the condition and progress of education in the school or school system, utilizing personal presentation, publications, the press, radio, television, and other channels of communication. (Op–All)

X 32 70. COMMUNITY SERVICES (1, 2)

Items under this heading may be used to describe activities outside the usual elementary, secondary, college, and adult education programs which the school or school system provides on a continuing basis for the needs of the community as a whole or for some segment of the community. (Rec–All) Among services provided for the community are the following:

X 32 70.01 *After School Activities for Pupils*—E.g., extended day activities for pupils with working mothers, and organized playground activities. (Op–Elem, Sec)
X 32 70.02 *Civic Activities*—E.g., lectures, concerts, exhibitions, and seminars. (Op–All)
X 32 70.03 *Community Recreation Programs*—(Op–All)
X 32 70.04 *Community Welfare Activities*—(Op–All)
X 32 70.05 *Facilities Designed for Community Use as well as for School Use*—(Op–All)
X 32 70.06 *Facilities Available for Community Use*—(Op–All)
X 32 70.07 *Identification of the Community Needs and Interests*—(Op–All)
X 32 70.08 *Library Service to Public*—(Op–All)
X 32 70.09 *Programs of Education in Custodial and Detention Care*—(Op–Elem, Sec)
X 32 70.10 *Services for Nonpublic School Pupils*—On a continuing basis. (Op–All) Where such services are provided they should be identified through the use of items from various portions of this handbook as appropriate.
X 32 70.11 *Tutoring and Homework Help Program*—E.g., after school tutoring and homework assistance to pupils of one or more schools, in a given school or at separate study centers. (Op–Elem, Sec)
X 32 70.20 *Coordination with Community Agencies*—The manner in which activities of the school system are coordinated with the activities of community agencies providing services related to the following: (Op–All)
X 32 70.21 *The Courts of Law*—(Op–All)
X 32 70.22 *Employment Agencies*—(Op–Sec, JrC, AdEd)
X 32 70.23 *Health and Welfare Agencies*—Including activities of any formal health council and any agency providing guidance services. (Op–All)
X 32 70.24 *Recreation Agencies*—Including agencies dealing with the fine arts. (Op–All)
X 32 70.29 *Other Community Agencies*—(Specify.) (Op–All)
X 32 70.90 *Other Community Services*—(Specify.) (Op–All)

X 32 81. FOOD SERVICES (1, 2)

Food services include those activities which have as their purpose the management of the food services program the school or school system and the preparation and serving of regular and incidental meals, lunches, or snacks in connection with school activities. (Op–All) Included are facilities for the cafeteria and any other food preparation area; related equipment and supplies (including vending machines); and services provided by food services personnel.

X 32 81.10 *Regular Meals*—Including breakfast and lunch. (Op–All)
X 32 81.20 *Incidental Meals and/or Snacks*—E.g., milk in the middle of the morning. (Op–All)
X 32 81.90 *Other Food Services*—(Specify.) (Op–All)

X 32 82. PUPIL TRANSPORTATION SERVICES (1, 2)

Pupil transportation services include those activities which have as their purpose the conveyance of pupils to and from school activities, either between home and school or on trips related to school activities. (Op–All) If a school system provides transportation services only for special groups of pupils—e.g., pupils with physical handicaps, or pupils transported to a vocational school in a neighboring school district—these special groups should be identified. If transportation services are provided, it may be desirable to indicate whether or not there is a cost to the pupils involved. Among pupil transportation services are the following:

X 32 82.10 *Transportation between Home and School*—(Op–All)
X 32 82.20 *Field Trips Related to School Activities*—(Op–All)
X 32 82.90 *Other Pupil Transportation Services*—E.g., transportation between local school districts. (Op–All) Any such service should be specified.

X 32 90. OTHER SERVICES SUPPORTING INSTRUCTION (1, 2)

Services supporting instruction, other than those identified under items X3210 and X3282, which are provided by the school or school system, e.g., a clothing center for needy pupils. (Op–All) Any such service should be specified.

COMMUNITY RESOURCES (1, 2)
X 33 00 Series

Information about outstanding or significant community resources which are available to a school or school system may be included under this heading. (Op–All) These resources include the facilities, agencies, businesses, and persons in the community outside the schools that may be, or are, used by the schools for their educative values, e.g., theaters, parks, playgrounds, libraries, art galleries, museums, zoos, planetariums, botanic gardens, universities, churches, scouts and other youth groups, service clubs, social-service agencies, industries, and individuals, including representatives of various occupational groups, cultural groups, and civic organizations.

LOCATION OF INSTRUCTION (OR SERVICE)
(2, 3, 4, 5)
X 34 00 Series

Items of information under this heading may be used to describe the location and nature of the facility or facilities used for instruction and for

services supporting instruction—e.g., a school facility, a hospital, and the home of a pupil—and to identify the location of the room or other teaching space into which a section is scheduled. If appropriate, identification may be made of those classes considered as "extension classes," and of locations used for outdoor education. Any special or unique built-in equipment should be identifiable with the teaching space.

X 34 10.10 *School Facility or Facilities*—One or more buildings or sites belonging to or used by a school or school system for school purposes. In identifying a section, the room number or other teaching space designation should be given.

X 34 10.11 *Location in Given School*—Identification of the room or other teaching space, when the section is scheduled into the facilities of the given school. (Rec–All) The room number or other teaching space designation should be given.

X 34 10.12 *Location in Other School in Same School System*—The room or teaching space, in another school of the same school system, into which the section is scheduled. (Rec–All)

X 34 10.13 *Location in School in Another School System*—The room or teaching space, in a school of another school system, into which the section is scheduled. (Rec–All)

X 34 10.20 *Home of Pupil*—The home or residence of a pupil. (Rec–All) For local use in designating a section, the specific home or residence should be identified.

X 34 10.30 *Hospital*—A building or site belonging to or used by a hospital, sanatorium, or convalescent home. (Rec–All) For identifying a section, the specific institution and room number or other space designation should be given.

X 34 10.40 *Business, Commercial, or Industrial Facility*—A building or site belonging to a business, commercial, industrial, or similar organization. (Rec–All) Any such facility and the organization to which it belongs should be identified.

X 34 10.90 *Other Nonschool Location*—A location other than those included under items X3410.10 to X3410.40, e.g., a building or site belonging to or used by a service organization or public noneducational agency. (Rec–All) Any such facility and the agency to which it belongs should be identified.

FACILITIES (2, 4, 5)
X 35 00 Series

A facility is a piece of land, a building site, a building, or a part of a building. Items of information under this heading may be used to describe school sites and buildings and the portions of these sites and buildings utilized as instructional space.[29]

X 35 10. FACILITIES OF SCHOOL (2)

The quantity and description of buildings and sites belonging to or used by a school for instruction and services supporting instruction. (Op–All) Items of information appropriate for describing school facilities—that is, the sites and buildings, including built-in equipment—are included in Handbook III, *Property Accounting for Local and State School Systems.*[30]

X 35 20. INSTRUCTIONAL SPACE FOR SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (4, 5)

The nature of the instructional space planned, available, or utilized for a self-contained class, course or cocurricular activity, e.g., regular classroom (permanent walls), laboratory room, shop room, and gymnasium. In addition, it may be desirable to specify (a) the subject-matter area, purpose, or activity for which the space is designed or appropriate, (b) the number of pupil stations,[31] and (c) the area in square feet for each instructional space, including any storage and other service areas opening into and serving as adjuncts to this particular space. Space utilized for purposes other than instruction in self-contained classes, courses, or cocurricular activities may be described with items from Handbook III.[32]

X 35 20.10 *Regular Instructional Spaces* — Instructional spaces designed, or adapted, in such a manner that they can be used to house any class that does not require special built-in equipment tailored to its specific needs. (Op–All)

X 35 20.11 *Regular Classroom (Permanent Walls)*—An instructional space—having permanent walls—which is designed, or adapted, in such a manner that it can be used to house any class that does not require special built-in equipment tailored to its specific needs. (Op–All)

X 35 20.12 *Regular Classroom (Movable Partitions)*—An instructional space—having, as one or more walls, partitions which can be moved without requiring special skill to include the room in a larger instructional space—which is designed, or adapted, in such a manner that it can be used to house any class that does not require special built-in equipment tailored to its specific needs. (Op–All)

X 35 20.13 *Large Group Instructional Space*—An instructional space considerably larger than the usual classroom which may be used for instructing more pupils than are in the usual group. Should this space be composed of two or more regular classrooms having movable partitions, information to number of classrooms or spaces should be included under item X3520.12. (Op–All)

X 35 20.14 *Small Group Instructional Space*—An instructional space considerably smaller than the usual classroom which is designed or adapted for instructing fewer pupils than are in the usual group, e.g., a room used for seminars. (Op–All)

X 35 20.20 *Special Instructional Spaces* — Instructional spaces designed, or provided with *special built-in equipment*, for specialized learning activities, e.g., kindergarten rooms, laboratories, and shops. (Op–All)

X 35 20.21 *Kindergarten Room*—A special instructional space designed, or provided with special built-in equipment, for use by a group or class that is organized to provide educational experiences for children for the year or years preceding the first grade. (Op–Elem)

X 35 20.22 *Laboratory Room*—A special instructional space designed, or provided with special built-in equipment, for pupil participation in learning activities involving scientific or applied experimentation, e.g., a laboratory in one of the sciences, mathematics, languages, driver education, or practical or performing arts. (Op–All)

---

[29] With reference to the permanency or movability of instructional facilities see glossary items for Permanent Building, Portable Building, and Mobile Classroom.

[30] Paul L. Reason and George G. Tankard, Jr., *op. cit.*

[31] A pupil station is defined as a specific accommodation for one pupil in an instructional space. A pupil station may be, for example, a seat in a classroom or a space in a laboratory.

[32] Paul L. Reason and George G. Tankard, Jr., *op. cit.*

X 35 20.23 *Shop Room*—A special instructional space designed or provided with special built-in equipment, for developing manipulative and related skills. (Op–All) The type of shop room should be specified.

X 35 20.24 *Home Economics Room*—A special instructional space designed, or provided with special built-in equipment, for learning activities involving the varied aspects of food, clothing, and shelter, with particular emphasis on consumer education; management of money, time, energy, and human resources; and human relationships focused on child growth and development, family relationships, and family health. (Op–All)

X 35 20.25 *Music Room*—A special instructional space designed, or provided with special built-in equipment, for learning activities involving choral and instrumental music. (Op–All) The areas of practice rooms, robe rooms, music library rooms, and instrument storage rooms serving as adjuncts to music rooms are included in the total area of music rooms for the school but are not counted directly under this general heading as individual music rooms; if counted, they should be treated as separate subitems under this general heading.

X 35 20.26 *Special Instructional Space for Exceptional Children*—An instructional space designed, or provided with special built-in equipment, specifically for accommodating classes organized for the particular purpose of providing instruction to exceptional children, e.g., classrooms for pupils who are visually handicapped, hearing handicapped, or crippled. (Op–Elem, Sec, AdEd) Types of pupils served are identified under item X0960 and should be specified.

X 35 20.29 *Other Special Instructional Space*—An instructional space designed, or provided with special built-in equipment, for some specific type of learning activity not included under items X3520.21 to X3520.26, e.g., a planetarium, or an instructional space having special built-in equipment for art, business education, or distributive education. (Op–All) Any such special instructional space should be specified.

X 35 20.30 *Other Instructional Spaces*—Instructional spaces that have been specifically designed, or adapted, to accommodate instructional activities somewhat different from those of the usual classroom or laboratory situation, e.g., libraries, study halls, separate audiovisual areas, research laboratories (not classroom laboratories), museums, auditoriums, gymnasiums, and multipurpose rooms. (Op–All)

X 35 20.31 *School Library*—An instructional space designed, or adapted, as a place for study and reading, and for the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for the use of the student body and school staff, but not for sale. (Op–All) Study carrels, audiovisual, storage, and other service areas opening into, and serving as adjuncts to, a particular library are considered parts of the library area. When school library services and audiovisual services are located in the same instructional space, this space frequently is referred to as an "instructional materials center." Audiovisual areas which do not open into, and are not adjuncts of, the library are recorded under item X3520.33, Audiovisual Room.

X 35 20.32 *Study Hall*—An instructional space designed, or adapted, for housing one or more pupils engaged in individual study of an informal nature of the lessons or assignments received in their self-contained classes or courses, including any study carrels which open into a study hall. (Op–All) A study carrel is considered to be a part of the room into which it opens and which it serves, e.g., a study hall, library, regular instructional space, or laboratory (see also item X3520.41).

X 35 20.33 *Audiovisual Room*—An instructional space designed, or provided with special built-in equipment, for audiovisual material storage, screening, and listening that is separate from the school library and does not serve as an adjunct to another room or area. (Op–All) An audiovisual area opening into and serving as an adjunct to a library is considered part of the library space under item X3520.31; activities carried on in such an area may be described with designations from under items X3212 and X3232, Audiovisual Services.

X 35 20.34 *Auditorium*—An instructional space designed and constructed with a built-in stage, and sloping floor or fixed seating, for use as an assembly center. (Op–All) Any similar area utilized for large group instruction should be included under this heading and identified separately. A "little theatre" for instruction and other activities in areas such as dramatics and forensics should not be included here, but should be included under item X3520.22 Laboratory Room.

X 35 20.35 *Gymnasium*—An indoor instructional space designed, or adapted, specifically for most physical education activities. (Op–All) Regular or special instructional spaces used in connection with the gymnasium are recorded individually as regular or special instructional spaces and not as part of the gymnasium. Special instructional spaces for swimming and for outdoor physical education are included under items X3520.89 and X3520.99.

X 35 20.36 *Gymnatorium*—An instructional space designed, or adapted, specifically for the combined functions that might normally be served by a separate gymnasium and a separate auditorium. (Op–All) *See also* definitions of auditorium under item X3520.34 and gymnasium under item X3520.35.

X 35 20.37 *Cafetorium*—An instructional space designed, or adapted, specifically for the combined functions that might normally be served by a separate cafeteria and a separate auditorium. (Op–All) *See also* definitions of auditorium under item X3520.34 and cafeteria in the glossary.

X 35 20.38 *Multipurpose Room*—An instructional space designed, or adapted, specifically for two or more of the combined functions that might normally be served by a separate library, separate audiovisual room, separate auditorium, separate gymnasium, separate gymnatorium, separate cafetorium, or separate cafeteria, such as assemblies, physical education, lunch, music, clubs, audiovisual work, and library services. (Op–All) Separate gymnatoriums and cafetoriums are not classified as multipurpose rooms. *See also* definitions under items X3520.31, X3520.32, X3520.33, X3520.34, X3520.35, X3520.36,

35 FACILITIES—Continued

X3520.37, and the definition of cafeteria or lunchroom in the glossary.

X 35 20.41 *Study Carrel*—A small enclosure or alcove designed for individual study, reading, viewing, or listening. (Op–All) A study carrel is considered to be a part of the room or space into which it opens and which it serves, e.g., a study hall, library, regular classroom, or laboratory. In addition, it may be separately identified as a study carrel.

X 35 20.89 *Miscellaneous Indoor Instructional Space*—Any instructional space in a building that is not classifiable under items X3520.10 through X3520.38, such as a research laboratory (not classifiable under item X3520.22), bowling alley, indoor swimming pool, indoor rifle range, museum, planetarium, and television production studio. (Op–All) The type of instructional space should be specified.

X 35 20.99 *Miscellaneous Outdoor Instructional Space*—Any outdoor instructional space such as an outdoor physical education area, multiple-car range, outdoor swimming pool, outdoor play area, school camp, and garden. (Op–All) The type of instructional space should be specified.

INSTRUCTIONAL EQUIPMENT AND SUPPLIES (3, 4, 5)

X 36 00 Series

Items of information under this heading may be used to identify general types of equipment (built-in or movable) and supplies utilized in instruction, e.g., types of reading materials, visual equipment and supplies, audio equipment and supplies, audiovisual equipment and supplies, and equipment and supplies for a specific activity. If desired, additional information may be included under each heading to indicate types, manufacturers, model numbers, quantities and other pertinent details as appropriate. For accounting purposes, it may be desirable to differentiate among those materials which are classified as built-in equipment,[33] movable equipment,[34] and supplies[35] (See also Handbook III[36]).

X 36 10. READING MATERIALS (4)

Written or printed matter intended to be read for purposes such as developing or improving reading skills, gathering information, and leisure, e.g., periodicals, reference books, textbooks, workbooks, and written programmed materials. This includes materials written in braille for blind pupils.

X 36 10.10 *Books*—Other than textbooks, reference books, and workbooks. (Op–All)

X 36 10.20 *Microforms*—E.g., microfilms, microfiche, microcards, and any other photographically reduced materials which must be read with the help of enlarging instruments. (Op–All)

X 36 10.31 *Newspapers*—(Op–All)

X 36 10.32 *Pamphlets and Documents*—(Op–All)

X 36 10.40 *Periodicals*—(Op–All)

X 36 10.50 *Reference Books*—Books designed by arrangement and treatment to be consulted for definite items of information rather than to be read consecutively, e.g., dictionaries, encyclopedias, bibliographies, and indexes. (Op–All)

X 36 10.60 *Study Guides*—Written, printed, or duplicated directions or questions used by pupils in independent study. (Op–All)

X 36 10.70 *Textbooks*—Other than programmed texts, which should be included under item X3610.82. (Op–All)

X 36 10.81 *Workbooks*—Other than programmed workbooks, which should be included under item X3610.82. (Op–All)

X 36 10.82 *Written Programmed Materials*—Other than textbooks and workbooks. (Op–All)

X 36 10.90 *Other Reading Materials*—(Op–All)

X 36 20. VISUAL EQUIPMENT AND SUPPLIES (4)

Devices and related supplies—other than reading materials (see item X3610) and exclusive of audiovisual materials (see item X3640)—by means of which learning is enhanced through the sense of sight, e.g., chalkboards, filmstrips, globes, overhead projectors, and picture sets.

X 36 20.10 *Cameras*—Including still and motion picture cameras and microform cameras. (Op–All)

X 36 20.21 *Chalkboards*—(Op–All)

X 36 20.22 *Display Boards and Display Cases*—Including flannel board, feltboard, magnetic board, tackboard, and hook and loop. (Op–All)

X 36 20.31 *Filmstrips and/or Slides*—Including projectors, filmstrips, and slides. (Op–All) Any such equipment and supplies used only in conjunction with recordings on records or magnetic tape should be included under item X3640, Audiovisual Equipment and Supplies.

X 36 20.41 *Globes*—(Op–All)

X 36 20.42 *Maps, Graphs, and/or Charts*—Including flipcharts—(Op–All)

X 36 20.50 *Motion Pictures (Silent)*—Including films, viewers, and projectors used *only* for silent motion pictures. (Op–All)

X 36 20.61 *Opaque Projectors*—(Op–All)

X 36 20.62 *Overhead Projectors*—Including related transparencies and overlays. (Op–All)

X 36 20.70 *Picture Sets and Study Prints*—Including mounted and unmounted pictures. (Op–All)

X 36 20.81 *Projection Screens*—(Op–All)

X 36 20.82 *Readers and Reader-Printers for Microforms*—E.g., for microfilm, microfiche, and/or microcards. (Op–All)

X 36 20.83 *Transparency Maker*—(Op–All)

X 36 20.90 *Other Visual Equipment and Supplies*—Including experience charts and flash cards. (Op–All) Any such equipment or supply may be specified.

X 36 30. AUDIO EQUIPMENT AND SUPPLIES (4)

Devices and related supplies—exclusive of audiovisual materials (see item X3640)—by means of which learning is enhanced through the sense of hearing, e.g., a radio, record player, and tape recorder.

X 36 30.10 *Closed Circuit Audio Equipment*—E.g., telephones, lines, cables, and other devices and equipment making audio materials available from a central repository. (Op–All)

X 36 30.20 *Dictating Machines*—Including accompanying tapes, discs, or cylinders. (Op–All)

X 36 30.30 *Radios*—(Op–All)

X 36 30.40 *Record Players*—Including accompanying discs. (Op–All)

X 36 30.50 *Tape Recorders*—Including accompanying recording tape. (Op–All)

---

[33] *Built-in Equipment*—Equipment that is an integral part of the building or grounds and permanently attached thereto.

[34] *Movable Equipment*—Equipment that is transportable from one location to another, without appreciable damage or change to the location from which it is removed or to the location where it is installed.

[35] *Supply*—A material item of an expendable nature that is consumed, worn out, or deteriorated in use; or one that loses its identity through fabrication or incorporation into a different or more complex unit or substance.

[36] Paul L. Reason and George G. Tankard, Jr., *op. cit.* pp. 98–100.

36 INSTRUCTIONAL EQUIPMENT AND SUPPLIES—Continued

X 36 30.60 *Telelecture Equipment*—Including provisions for one- or two-way communication with amplification. (Op–All) This sometimes is combined with a visual reproduction device.

X 36 30.90 *Other Audio Equipment and Supplies*—Including listening tables and headphones. (Op–All)

X 36 40. AUDIOVISUAL EQUIPMENT AND SUPPLIES (4)

Optical, electronic, and other devices—and related supplies—by means of which learning is enhanced through the combined senses of hearing and sight, e.g., sound motion pictures and television. Frequently, two or more of these components are combined into electronic distribution systems, some of which incorporate remote or dial access capabilities.

X 36 40.10 *Closed Circuit Audio and Video Equipment*—E.g., telephones, lines, cables, and other devices and equipment making audiovisual materials available from a central repository. (Op–All)

X 36 40.20 *Filmstrips or Slides with Sound*—E.g., sound tapes or records accompanying filmstrips or slides. (Op–All)

X 36 40.30 *Motion Pictures (Sound)*—Including projectors and films. (Op–All)

X 36 40.40 *Television Cameras*—Including related studio equipment. (Op–All)

X 36 40.50 *Television Receiving Sets*—(Op–All)

X 36 40.60 *Video Tape Recorder*—Including video tapes. (Op–All)

X 36 40.90 *Other Audiovisual Equipment and Supplies*—E.g., multimedia kits, pupil-response equipment, certain devices for programmed instruction, and devices for remote or dial access to electronic distribution systems. (Op–All)

X 36 50. THREE-DIMENSIONAL AND MANIPULATIVE EQUIPMENT AND SUPPLIES (4)

Equipment and supplies by means of which learning is enhanced through the sense of touch, e.g., objects, models, and specimens, including raised relief maps and manipulative aids used in arithmetic. (Op–All)

X 36 60. EQUIPMENT AND SUPPLIES FOR SPECIFIC TYPE OF ACTIVITY (3, 4, 5)

Equipment and related supplies which are provided for instruction in a specific type of instructional activity and which are not classifiable elsewhere.

X 36 60.10 *Art Equipment and Supplies*—E.g., potter's wheels, kilns, easels, brushes, paints, paper, and other equipment and supplies for activities such as metalworking, weaving, drawing, painting, photographing, printing, modeling, forming, carving, and constructing. (Op–All)

X 36 60.20 *Business Equipment and Supplies*—E.g., typewriters, calculating machines, keypunch machines, and sorting machines. (Op–All)

X 36 60.30 *Driver Education and Equipment and Supplies*—E.g., automobiles, and automobile and traffic simulators. (Op–All)

X 36 60.40 *Homemaking Equipment and Supplies*—E.g., ranges, household tools and utensils, sewing machines, pressing and ironing equipment, and textile fabrics. (Op–All)

X 36 60.50 *Industrial Equipment and Supplies*—E.g., welding apparatus, powersaws, lathes, and handtools. (Op–All)

X 36 60.60 *Music Equipment and Supplies*—E.g., pianos, instruments, storage cabinets, and staff liners. (Op–All)

X 36 60.70 *Physical Education Equipment and Supplies*—E.g., game equipment, gymnastics equipment, towels, soap, and equipment for physical rehabilitation. (Op–All)

X 36 60.80 *Scientific Laboratory Equipment and Supplies*—E.g., utility outlets, bunsen burners, chemicals, microscopes, and balances. (Op–All)

X 36 60.90 *Equipment and Supplies for Other Specific Type of Activity*—E.g., stage and stage equipment. (Op–All) Any such equipment or supply may be specified.

X 36 70. FURNITURE AND FURNISHINGS (4)

Movable articles used in furnishing classrooms and other instruction areas, e.g., desks, chairs, tables, cots, book shelves, file cabinets, wheelchairs, rugs, and light control drapes, blinds, and shades. (Op–All)

X 36 90. OTHER INSTRUCTIONAL EQUIPMENT AND SUPPLIES (4)

General types of equipment and supplies other than those included under items X3610.10 to X3670, e.g., electronic computers and related software. (Op–All) Any such type of equipment or supply may be specified.

STRUCTURE OF PROGRAM OF STUDIES OR COURSE (2, 3)

X 41 00 Series

The manner in which the content of the program of studies or course is structured, e.g., separate subjects, broad fields, integrated, and core units.

X 41 10.10 *Separate Subjects: Discrete Course(s) or Subject-Matter Area(s)*—A structure in which each subject-matter area or segment is taught as an entity. (Op–Elem, Sec)

X 41 10.20 *Separate Subjects: Correlated Courses or Subject-Matter Areas*—A structure in which two or more subject-matter areas or segments, taught during the same school term to many of the same pupils, are articulated in such a manner that the relationships of the subject-matter areas are made a part of the instruction without destroying the identity of the respective subject-matter areas. (Op–Elem, Sec) Any course or section with which a given course or section is correlated may be specified.

X 41 10.30 *Broad Fields*—A structure in which closely related subject matter is combined (or fused) into a broad subject-matter area, e.g., history, geography, economics, sociology, and government combined into social studies; arithmetic, geometry, and algebra combined into general mathematics. This plan sometimes is referred to as "fusion." (Op–Elem, Sec)

X 41 10.40 *Integrated*—A structure in which subject-matter area boundaries are flexible, with all offerings of a class being taught in relation to broad areas of study and in relation to one another as mutually associated in some genuine relationship. (Op–Elem, Sec)

X 41 10.50 *Core Units*—A structure in which a sequence of central problems or units growing out of pupil interests, concerns, and needs provides for content and learning experiences. (Op–Elem, Sec) In a departmental organization, courses having this structure typically meet for two or more consecutive class periods (See item X0686.12, Block of Time).

X 41 10.80 *Combination*—A combination of structures included under items X4110.10 to X4110.50 and X4110.90. (Op–Elem, Sec) The structures comprising such a combination should be specified.

41 STRUCTURE OF PROGRAM OF STUDIES OR COURSE—Continued

X 41 10.90 *Other Structure*—A structure of the content of the program of studies other than those presented under items X4110.10 to X4110.50. (Op–All) Any such structure should be specified.

MEDIUM OF INSTRUCTION (OR DIRECTION) (4, 5)

X 42 00 Series

The principal medium by which a teacher communicates with his pupils, e.g., direct pupil-teacher interaction (in-school or out-of-school) and indirect pupil-teacher interaction such as television and correspondence. Items of information indicating where the pupil receives instruction—e.g., within the given school, at another school, at home, or in a hospital—are included under item X 34 00.

X 42 10. DIRECT PUPIL-TEACHER INTERACTION (4)

Instruction by one or more teachers[37] physically present, e.g., by a single teacher or by a team of 2 or more teachers. (Op–All) This instruction may take place in a school setting or out of school. Types of equipment utilized by teachers in their instruction may be described with terms included under item X3600.

X 42 11. In-school Instruction (4)

X 42 11.10 *Single Teacher*—(Op–All)

X 42 11.20 *Team of Teachers*—Two or more teachers planning, instructing, and evaluating together for a given group of pupils. (Op–All)

X 42 11.30 *Tutoring*—An activity in which instruction is provided an individual pupil by direct interaction with a teacher. (Op–All)

X 42 11.40 *Independent Study*—An activity in which pupils, carrying on their studies without attending formal classes, consult periodically with one or more staff members for direction and assistance, and, frequently, work toward the completion of individual study projects. (Op–All)

X 42 11.90 *Other*—Inschool instruction utilizing direct pupil-teacher interaction other than that included under items X4211.10 to X4211.40, e.g., instruction by a sequence of teachers. (Op–All) Any such instruction should be specified.

X 42 12. Out-of-School Instruction (4)

X 42 12.10 *On-the-job Supervision*—Supervision of the work portion of a course in a work-study program, at the pupil's place of employment, by a supervisor not employed by the school. (Op–Sec, JrC, AdEd)

X 42 12.20 *Home and/or Hospital Instruction*—Instruction provided by a teacher in a residence, hospital, sanatorium, or convalescent home for pupils unable to attend a school. (Op–All) More specific items for location of instruction are included under item X3400.

X 42 12.90 *Other*—Out-of-school instruction utilizing direct pupil-teacher interaction other than that included under items X4212.10 and X41212.20. (Op–All) Any such instruction should be specified.

X 42 20. INDIRECT PUPIL-TEACHER INTERACTION (4)

Instruction in which the *principal medium* is other than direct pupil-teacher interaction, e.g., a complete course or self-contained class taught by television, correspondence, telephone, or self-teaching materials.

X 42 20.10 *Television*—Including closed circuit and broadcast television. (Op–All)

X 42 20.20 *Correspondence*—Instruction which provides for the systematic exchange between teacher and pupils of materials sent by mail. (Op–Sec, JrC, AdEd)

X 42 20.30 *Radio*—(Op–Elem, Sec, AdEd)

X 42 20.40 *Telephone*—E.g., instruction in which a telephone provides two-way communication between a class and a resource person, or between a homebound pupil and his regular classroom. (Op–Elem, Sec, AdEd)

X 42 20.50 *Self-teaching Materials (Programmed Instruction)*—Instruction provided by self-teaching materials (e.g., a programmed text, computer assisted instruction or other "teaching machine," or prerecorded tapes or records used for a foreign language course), whether in school, at home, or elsewhere. (Op–All)

X 42 20.60 *Recordings*—Instruction provided primarily through the medium of tape recordings or other recording media, when such instruction is not included under items X4220.20 and X4220.50. (Op–Elem, Sec, AdEd)

X 42 20.90 *Other*—Instruction having as its principal medium indirect pupil-teacher interaction other than that included under items X4220.10 to X4220.60, e.g., motion pictures and filmstrips. (Op–All) Any such medium should be specified.

METHODS OF INSTRUCTION (OR DIRECTION) (4, 5)

X 43 00 Series

The principal methods by which instruction is provided pupils, e.g., demonstration, discussion, laboratory experience, and lecture.

X 43 00.01 *Comparative Analysis*—A thought process, structured by the teacher, employing the description, classification, and analysis of more than one system, group, or the like so as to ascertain and evaluate similarities and differences. (Op–All)

X 43 00.02 *Demonstration*—An activity in which the teacher or another person uses examples, experiments, and/or other actual performance in order to illustrate a principle or show others how to do something. (Op–All)

X 43 00.03 *Diagnosis*—The continuous determination of the nature of learning difficulties and deficiencies, used in teaching as a basis for the selection—day-by-day or moment-by-moment—of appropriate content and methods of instruction. (Op–All)

X 43 00.04 *Directed Observation*—Guided observation provided for the purpose of improving the study, understanding, and evaluation of that which is observed. (Op–All)

X 43 00.05 *Discussion*—An activity in which pupils, under teacher and/or pupil direction, exchange points of view concerning a topic, question, or problem in order to arrive at a decision or conclusion. (Op–All)

X 43 00.06 *Dramatization*—Learning experiences concerned with expressive interpretation of ideas, concepts, and/or roles. (Op–All)

---

[37] A teacher is defined in Handbook IV: "A staff member performing assigned professional activities in guiding and directing the learning experiences of pupils in an instructional situation."

43 METHODS OF INSTRUCTION—Continued

X 43 00.07	*Drill*—An orderly, repetitive, learning activity intended to help develop or fix a specific skill or aspect of knowledge. (Op–All)
X 43 00.08	*Experimentation*—An activity involving a planned procedure accompanied by control of conditions and/or controlled variation of conditions together with observation of results for the purpose of discovering relationships and evaluating the reasonableness of a specific hypothesis. (Op–All)
X 43 00.09	*Field Experience*—Educational work experience, sometimes fully paid, acquired by pupils in a practical service situation. (Op–All) Reference to *cooperative on-the-job training* is not recorded under this heading, but is included under item X4212.10.
X 43 00.10	*Field Trip*—An educational trip to one or more places where pupils may study the content of instruction directly in its functional setting, e.g., a trip to a factory, newspaper office, or fire department. (Op–All)
X 43 00.11	*Group Work*—A process in which members of the class, working cooperatively rather than individually, formulate and work toward common objectives under the guidance of one or more leaders. (Op–All)
X 43 00.12	*Laboratory Experience*—Learning activities carried on by pupils in a laboratory designed for individual or group study of a particular subject-matter area, involving the practical application of theory through observation, experimentation, and research, or, in the case of foreign language instruction, involving learning through demonstration, drill, and practice. This applies also to the study of art and music, though such activity, in this instance, may be referred to as a studio experience. (Op–All)
X 43 00.13	*Lecture*—An activity in which the teacher gives an oral presentation of facts or principles, the class frequently being responsible for note taking. This activity usually involves little or no pupil participation by questioning or discussion. (Op–All)
X 43 00.14	*Listening*—Activities provided for pupils to learn by auditory means. (Op–All)
X 43 00.15	*Manipulative and Tactile Activity*—Activity by which pupils utilize the movement of various muscles and the sense of touch in order to develop manipulative and/or perceptual skills. (Op–Elem, Sec, AdEd)
X 43 00.16	*Modeling and Imitation*—An activity, frequently used for instruction in speech, in which the pupils listen to and observe a model as a basis upon which to practice and improve their performance. (Op–All)
X 43 00.17	*Practice*—An activity in which pupils have opportunity to put into practice those skills and understandings previously learned through other instructional activities. (Op–All)
X 43 00.18	*Problem Solving*—A thought process structured by the teacher and employed by the pupils for clearly defining a problem, forming hypothetical solutions, and possibly testing the hypotheses. (Op–All)
X 43 00.19	*Programmed Instruction*—Instruction utilizing a workbook, textbook, or mechanical and/or electronic device which has been "programmed" to help pupils attain a specified level of performance by (a) providing instruction in small steps, (b) asking one or more questions about each step in the instruction and providing instant knowledge of whether each answer is right or wrong, and (c) enabling pupils to progress at their own pace. (Op–All)
X 43 00.20	*Project*—A significant practical unit of activity, having educational value, aimed at one or more definite goals of understanding, and involving the investigation and solution of problems. (Op–All)
X 43 00.21	*Reading*—Activities—including both silent reading and listening to oral reading—in which pupils get meaning from written or printed sources. (Op–All)
X 43 00.22	*Recitation*—Activities devoted to reporting to a class or other group about information acquired through individual study or group work. (Op–All)
X 43 00.23	*Seminar*—An activity in which a group of pupils, engaged in research or advanced study, meets under the general direction of one or more staff members for a discussion of problems of mutual interest. (Op–Sec, JrC, AdEd)
X 43 00.24	*Shopwork*—An activity emphasizing experiences in woodwork, metalwork, or other industrial processes and procedures. (Op–Elem, Sec, AdEd)
X 43 00.25	*Simulation*—A learning process which involves pupils as participants in role presentations and/or games simulating real-life situations or environments. (Op–All)
X 43 00.26	*Testing*—A process utilizing an examination, quiz, or other procedure measuring ability, achievement, and interest as a basis for the selection of appropriate content and methods of instruction, or utilizing a sequence of single questions as a means of selecting content and/or imparting information, as is the case in programmed instruction. (Op–All)
X 43 00.99	*Other Methods of Instruction*—Principal methods, other than those included under items X4300.01 to X4300.26, by which instruction is provided for pupils, e.g., "inquiry," or, for the deaf, an oral, manual, or combined oral and manual method of instruction. (Op–All) Any such method should be specified.

OTHER PROCEDURES FOR INSTRUCTION (OR DIRECTION) (4)

X 44 00 Series

Items and categories of information under this heading may be used to describe selected aspects of teaching procedures typically utilized in the instruction of a self-contained class or course, e.g., grouping practices, resources used, and evaluation procedures. Other selected categories of information related to procedures for instruction are included under items X 41 00, X 42 00, and X 43 00.

X 44 10. SIZE OF GROUP FOR INSTRUCTION (4)

The size of a group for instruction in aspects of the subject matter, in relation to the usual section size for the type of self-contained class or course.

X 44 10.10	*Large Group*—A group with the number of pupils in two or more typical sections of a course or self-contained class, frequently assembled for instruction in certain aspects of subject matter. (Op–Elem, Sec, JrC)
X 44 10.20	*Small Group*—A group with half the number of pupils in a typical section, or fewer, frequently assembled for instruction in certain aspects of the subject matter, while other members of the section receive similar instruction from one

44 OTHER PROCEDURES FOR INSTRUCTION (OR DIRECTION)—Continued

or more other staff members at the same time or from the same staff member at other times. (Op–Elem, Sec, JrC)

X 44 10.30 *Individual Instruction*—Instruction for a single person. (Op–Elem, Sec, JrC)

X 44 20. BASIS FOR GROUPING PRACTICES (4)
Primary considerations typically utilized for grouping pupils within classes for instruction in a given self-contained class or course. (Op–Elem, Sec)

X 44 20.10 *Abilities*
X 44 20.20 *Achievement*
X 44 20.30 *Age*
X 44 20.40 *Interests*
X 44 20.50 *Personality Characteristics*—E.g., a special class for emotionally disturbed pupils.
X 44 20.60 *Physical Development*
X 44 20.70 *Sex*
X 44 20.90 *Other Basis*—(Specify.)

X 44 30. PUPIL PARTICIPATION IN PLANNING (4)
Pupil participation in the selection of objectives, content, and activities for a self-contained class or course. (Op–Elem, Sec)

X 44 40. PROVISIONS FOR INDIVIDUALIZATION OF INSTRUCTION (4)
The manner in which instruction is individualized, including the use of procedures, materials, and equipment such as independent study (see item X4211.40), tutoring (see item X4211.30), small groups (see item X4410.20), programmed instruction (see items X4220.50 and X4300.19), and assignments of differing quantities and types of schoolwork given to one or more pupils according to individual needs, interests, and abilities. (Op–Elem, Sec) These provisions may be specified.

X 44 50. USE OF PUPIL LEADERSHIP (4)
Pupil participation in the direction or conduct of the activities of the self-contained class or course. In some instances, this means that the teacher or other staff member plays only a minor role in the planning and direction of activities. (Op–Elem, Sec)

X 44 60. EVALUATION PROCEDURES (4)
Means by which teachers evaluate pupil performance and the adequacy of the subject matter and methods of instruction. (Op–Elem, Sec)

X 44 60.10 *Observation*
X 44 60.20 *Teacher-made Texts*
X 44 60.30 *Standardized Achievement Tests*
X 44 60.40 *Inventories*
X 44 60.50 *Pupil Self-evaluation*
X 44 60.90 *Other Evaluation Procedure*—(Specify.)

X 44 90. OTHER TEACHING PROCEDURES (4)
Typical teaching procedures other than those identified under items X4410 to X4460.90. (Op–Elem, Sec) Any such procedure should be specified

SCHOOLS (SUMMARY INFORMATION) (1)
X 51 00 Series

Summary information about schools may be recorded under this heading.

X 51 10. SCHOOLS IN SCHOOL SYSTEM (1)
A school system may be described in part by information about its schools, such as quantity, type, pupil membership, and programs of studies. Such information may be drawn from the descriptions of individual schools, as suggested in the 20000 Series of chapter 3, and used to describe the schools of the school system collectively and individually. (Rec)

FACILITIES (SUMMARY INFORMATION) (1)
X 52 00 Series

Summary information about facilities may be recorded under this heading.

X 52 10. FACILITIES WITHIN SCHOOL SYSTEM (1)
The types and quantities of facilities within a school system may be derived from item X3500 describing the individual schools of the system (see also item 23510 in chapter 3). These facilities include the buildings and sites belonging to or used for school purposes by the schools or by the school system. (Op)

PROGRAMS OF STUDIES (SUMMARY INFORMATION) (1, 2)
X 53 00 Series

Summary information about programs of studies may be included under this heading.

X 53 10. PROGRAMS OF STUDIES WITHIN SCHOOL SYSTEM (1)
The types of programs of studies within a school system may be derived from item X5320, for individual schools, to indicate the variety in programs of studies and the number of schools offering each type. (Op)

X 53 20. PROGRAMS OF STUDIES OF SCHOOL (2)
Items of information describing aspects of the program of studies of a school may be drawn from the following items, with additional detail suggested in the 30000 Series of chapter 3, Items Describing A Program of Studies.

X 53 21. Single Program or Multiple Programs of Studies (2)
An indication as to whether the school provides one program of studies for all pupils (e.g., a college preparatory program) or offers more than one program of studies (e.g., a college preparatory and an occupational program).

X 53 21.10 *Single Program of Studies*—(Rec–Sec)
X 53 21.20 *Multiple Programs of Studies*—(Rec–Sec)

X 53 22. Type(s) of Program of Studies (2)
An identification of each type of program of studies offered by the school. (Rec–All) Designations for these programs are included under item X0243.

X 53 23. Area(s) of Specialization (2)
A designation, as appropriate, for the subject-matter area or areas in which pupils may specialize or concentrate within each program of studies offered by the school. (Op–Sec, JrC, AdEd) For designations, see item X2140 and appropriate portions of chapters 5 and 6.

SERVICES SUPPORTING INSTRUCTION (SUMMARY INFORMATION) (1, 3)
X 54 00 Series

Summary information about services supporting instruction may be included under this heading.

X 54 10. SCHOOL SERVICES SUPPORTING INSTRUCTION WITHIN THE SCHOOL SYSTEM (1)
The types of school services supporting instruction within a school system may be derived from item X3200 describing the individual schools of the system (see also item 23200 in chapter 3) to indicate the variety in school services supporting instruction and the number of schools offering each type of service. This includes services—such as resource services for pupils, pupil personnel

54 SERVICES SUPPORTING INSTRUCTION (SUMMARY INFORMATION)—Cont.

services, services for the instructional staff, and community services—which are not the actual teaching of classes and individual pupils, but enhance the instruction of the schools. (Op)

X 54 30. INSTRUCTIONAL SERVICES RELATED TO PROGRAM OF STUDIES (3)

Appropriate items of information from item X3200 of this chapter and the 50000 Series of chapter 3 may be utilized to describe instructional services closely associated with a program of studies, including the nature of the service, persons receiving the service, locations of service, and staff members assigned to the service. (Op–All)

PUPIL MEMBERSHIP (SUMMARY INFORMATION) (1, 2, 3, 4)

X 55 00 Series

Summary information about pupils may be included under this heading.

X 55 10. PUPIL MEMBERSHIP WITHIN SCHOOL SYSTEM (1)

An aspect of the size of the school system may be described by the number of pupils it serves, that is, by its pupil membership. The membership within a school system (or of a school) is the number of pupils on the current rolls within the school system (or school) on a given date.[38] (Rec) For the school system, this figure may be derived by totalling the memberships of the individual schools as indicated under item X0910. If desired, additional information about these pupils—such as the number of pupils in the school system by sex, race, ability to speak English, programs of studies, and courses—may be derived from items X0930, X0940, and X5530 by totalling each of these items for all schools of the system.

X 55 30. PUPIL MEMBERSHIP IN PROGRAMS OF STUDIES, COURSES, AND COCURRICULAR ACTIVITIES (2, 3)

Information about pupil membership in the various types of programs of studies, self-contained classes, courses, and cocurricular activities of a school—or in the classes, courses, and activities of a program of studies—may be derived from items X0910 and X5540. (Op–All)

X 55 40. PUPIL MEMBERSHIP IN SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (4)

Information about pupil membership in the general self-contained class or course may be derived in part from item X0910 for the number of pupils scheduled into the sections of the class or course. (Op–All) The identity of these pupils may be obtained with the use of item X0970 for these sections.

STAFF MEMBERS (SUMMARY INFORMATION) (1, 2, 3, 4)

X 56 00 Series

Summary information about instructional staff members may be included under this heading.

X 56 10. INSTRUCTIONAL STAFF MEMBERS WITHIN SCHOOL SYSTEM (1)

An aspect of the size of a school system may be described by the number of instructional personnel it employs. One indication of the presumed quality of instruction may be derived from the qualifications of the instructional staff for the assignments with which they are engaged.

The instructional staff includes those persons whose full-time or part-time assigned activities consist of teaching, aiding teaching, supervising instruction, improving the quality of teaching, or directing and managing a school. Among such persons are teachers, supervisors of instruction, school librarians, audiovisual personnel, and other instructional specialists. This also includes the instructional supervision function of school principals. Teachers frequently are classified further to indicate whether they are classroom teachers or whether they communicate with their pupils through a medium such as television, radio, or correspondence.[39] It is recommended that the school system have, as a minimum, information about the number and certification status of personnel in the school system. (Rec)

Information about the staff members of the school system may be derived from the summaries provided in items X5620, X5630, and X5640 as well as from information about their specific assignments in sections and services as provided in item X3100.

X 56 20. INSTRUCTIONAL STAFF MEMBERS WITHIN SCHOOL (2)

Information about the staff members involved in the instruction and direction of the self-contained classes, courses, cocurricular activities, and services provided by a school may be derived from information included under items X5630, X5640, and X3100. (Op–All) It could encompass a summary of the number of staff members, by assignment, and be related to characteristics of staff members through staff identification numbers and the personnel records.

X 56 30. INSTRUCTIONAL STAFF MEMBERS FOR PROGRAMS OF STUDIES (3)

Information about the staff members involved in the instruction and direction of self-contained classes, courses, cocurricular activities, and services which are a part of a given program of studies may be derived from information included under items X5640 and X3100. (Op–All) It could encompass a summary of the number of staff members, by assignment, and be related to characteristics of staff members through staff identification numbers and the personnel records. At its option, a school or school system may maintain separately a list of staff members qualified but not currently active in instructing or directing certain courses, cocurricular activities, and service which are a part of the program of studies.

X 56 40. STAFF MEMBERS FOR SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (4)

Information about the staff members involved in the instruction of the various sections of a given self-contained class or course may be derived from information included under item X3110, Teacher or Other Staff Member Assigned. (Op–All)

COURSES (SUMMARY INFORMATION) (2, 3)

X 57 00 Series

Summary information about courses may be included under this heading.

X 57 20. COURSES OFFERED BY SCHOOL (2)

Appropriate items of information from the 40000 and 50000 Series of chapter 3 may be

---

[38] John F. Putnam and George G. Tankard, Jr. *op. cit.*, p. 102.

[39] For a more complete description of items of information about staff, see Allan R. Lichtenberger and Richard J. Penrod, *op. cit.*

57 COURSES (SUMMARY INFORMATION) —Continued

utilized to describe courses provided by the school, including subject matter, grade placement, level of difficulty, characteristics of pupils served, planned outcomes, number of pupils, number of sections, and staff members providing instruction. (Rec–Sec; Op–JrC, AdEd)

X 57 31. Courses in Program of Studies (3)

Courses which are required or elective for the program of studies are identified under items X2151 and X2152. These courses may be described using appropriate items of information from the 40000 Series of chapter 3, including the type of information included under item X5720, above. (Rec–Sec; Op–JrC, AdEd)

X 57 32. Courses Offered by Department (3)

Courses offered by a department of a school, such as a social studies department or home economics department. These courses may be described using appropriate items of information from the 40000 Series of chapter 3, including the type of information included under item X5720, above. (Op–Sec, JrC, AdEd)

COCURRICULAR ACTIVITIES (SUMMARY INFORMATION) (2, 3)

X 58 00 Series

Summary information about cocurricular activities may be included under this heading.

X 58 20. COCURRICULAR ACTIVITIES PROVIDED BY SCHOOL (2)

Appropriate items of information from the 40000 and 50000 Series of chapter 3 may be utilized to describe cocurricular activities provided by the school, including the content of each cocurricular activity, level of ability required, characteristics of pupils served, planned outcomes, number of pupils, and staff members providing instruction or direction. (Op–All)

X 58 30. COCURRICULAR ACTIVITIES RELATED TO PROGRAM OF STUDIES (3)

Appropriate items of information from the 40000 and 50000 Series of chapter 3 may be utilized to describe cocurricular activities related to the program of studies, including the types of information suggested under item X5820, above. (Op–Sec, JrC, AdEd)

SECTIONS (SUMMARY INFORMATION) (4)

X 59 00 Series

X 59 00. SECTIONS OF SELF-CONTAINED CLASS, COURSE, OR COCURRICULAR ACTIVITY (4)

This category includes information about the manner in which the various sections of a self-contained class or course vary from one to another. (Op–All) Any such information—including factors such as varying pupil groups, differences in planned outcomes, and variety in level of difficulty—should be included also under item X0100 (or item 50100 of chapter 3) to indicate more exactly the specifications for each section of the self-contained class or course.

OTHER INFORMATION (1, 2, 3, 4, 5)

X 99 00 Series

X 99 00. OTHER INFORMATION (1, 2, 3, 4, 5)

Included under this heading is information not classifiable under items X0100 to X5900. (Op–All)

5

Classification of Items of Information About Subject-matter Areas and Cocurricular Activities

Chapters 5 and 6 are designed to assist local school systems and State education agencies in identifying and describing items of information about subject matter and cocurricular activities in elementary, secondary, junior college, and adult education instructional programs. *Twenty* subject-matter areas—plus one area for cocurricular activities and one area for general elementary education and general secondary education—including selected subject matter in each, have been identified and included in this handbook as representative of the subject matter provided in the instructional programs cited above. *Seven* of these areas are frequently referred to as vocational areas, and are Agriculture, Distributive Education, Health Occupations Education, Home Economics, Office Occupations, Technical Education, and Trade and Industrial Occupations.

The selection of the subject-matter areas, including the subject matter in them—classified in this chapter and described in chapter 6—was determined by (1) an extensive study of record and report forms of local school systems and State education agencies, (2) an extensive review of a wide range of professional literature concerned with subject-matter areas and cocurricular activities, and (3) conferences with numerous persons in State education agencies, local school systems, colleges and universities, and the Office of Education. In addition to being useful in identifying, classifying, and describing various aspects of subject matter, the 22 areas are intended to provide a means for relating teacher certification to selected subject-matter areas and cocurricular activities, as well as aspects of subject matter within them. The findings in the research of a wide range of literature and record and report forms closely parallel the subject-matter areas treated in chapters 5 and 6.

A coding system, appropriate for use in schools and school systems, is used which provides a distinct identity for each subject-matter area and for each of the classified items of information within it. The Cocurricular Activities and the General Elementary Education and General Secondary Education areas are coded in the same manner. Definitions of the items are found in chapter 6, and the page numbers on which the definitions are recorded are indicated in the column under the heading of "Definition page No." to the right of the items classified in this chapter.

Identification Numbers

The code numbers appearing at the left of the items of information included in the classifications are for identification purposes. Many of the items are refined to include one or more related subitems of information. The identification codes may be used with appropriate modifications in the collection, storage, retrieval, and transmission of information about subject matter and may be used by local and State school systems for both manual and machine methods of data processing. The interpretation of the 10-digit code used in chapters 5 and 6 is as follows:

- 00 First 2-digit position: subject-matter area
  - 00 Second 2-digit position: principal segment of subject matter
    - 00 Third 2-digit position: division of principal segment
      - 00 Fourth 2-digit position: first-level detail of division of principal segment (in some cases principal segments are substructured into major aspects rather than discrete divisions of subject matter, the third 2-digit position being vacant with major aspects being identified in the fourth 2-digit position, e.g., Distributive Education and selected portions of Mathematics).

00 Fifth 2-digit position: second-level detail of division

Information According to Type of Instructional Program

Information about *subject matter* in instructional programs is essential for schools and school systems throughout the United States and its outlying areas. There are differences among local schools and school systems concerning selected aspects of subject matter emphasized in the various subject-matter areas. Those items of information which describe the subject matter of instruction provided in a local school or school system may be identified locally by inserting the designation "X" after them for the appropriate type of instructional program—elementary, secondary, junior college, or adult education. These designations may be recorded on the right-hand side of the page, beginning on this page. Thus, the arrangement of classifications of items and types of programs was designed to provide a specific descriptive reference when filled in by the user.

Cross-References

The cross-references used in this chapter and chapter 6 are as follow:

See An item followed by "(See . . . .)" has become subsumed in the item to which cross-reference is made.

See also An item followed by "(See also . . . .)" is also defined, with variation for a particular application, in the subject-matter area to which cross-reference is made.

For definition see An item followed by "(For definition see . . . .)" has only one definition. This definition is in the subject-matter area to which cross-reference is made.

For description see An item followed by "(For description see . . . .)" appears only under Technical Education and refers to substantive content in another subject-matter area. The term "description" indicates that the item referred to includes a description of the *nature* of the content at the *technical level.*

Included as An item followed by "(Included as . . . .)" has only one definition. The definition is in the subject-matter area in which the item followed by "Included as" appears.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
01.00 00 00 00	AGRICULTURE	153				
01.01 00 00 00	Agricultural Production	154				
01.01 01 00 00	Animal Science (Included as 16.02 01 00 00 *Animal Science* under TECHNICAL EDUCATION and as part of 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION)	154				
01.01 01 01 00	Livestock and Poultry	154				
01.01 01 01 01	Dairy Cattle	154				
01.01 01 01 02	Beef Cattle	154				
01.01 01 01 03	Horses	154				
01.01 01 01 04	Swine	154				
01.01 01 01 05	Sheep	154				
01.01 01 01 06	Poultry	154				
01.01 01 01 99	Other Livestock and Poultry (Specify.)	154				
01.01 01 02 00	Nutrition (See also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)	154				
01.01 01 03 00	Genetics (See also Major Aspects of the Biological Sciences, 13.02 00 14 00 *Genetics*, under NATURAL SCIENCES.)	154				
01.01 01 04 00	Physiology (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)	154				
01.01 01 05 00	Animal Health	154				
01.01 01 06 00	Production Management	154				
01.01 01 06 01	Feeding Practices	154				
01.01 01 06 02	Housing Practices	154				
01.01 01 06 99	Other Production Management (Specify.)	154				
01.01 01 99 00	Other Animal Science (Specify.)	154				

Classification of items of information		Definition page No.	Elementary	Secondary	Junior College	Adult education
01 AGRICULTURE—Continued						
01.01 02 00 00	Plant Science (Included as 16.02 04 00 00 *Plant Science* under TECHNICAL EDUCATION)	154				
01.01 02 01 00	Crops	154				
01.01 02 01 01	Cereal Grain Crops	154				
01.01 02 01 02	Fiber Crops	154				
01.01 02 01 03	Forage Crops	154				
01.01 02 01 04	Oil Crops	154				
01.01 02 01 05	Tree Fruit and Nut Crops	154				
01.01 02 01 06	Small Fruit Crops	155				
01.01 02 01 07	Vegetable Crops	155				
01.01 02 01 08	Ornamental Crops (See also 01.05 00 00 00 *Ornamental Horticulture (Production, Processing, Marketing, and Services)*.)	155				
01.01 02 01 09	Farm Forestry (For definition see 01.07 00 00 00 *Forestry (Production, Processing, Management, Marketing, and Services)*.)	155				
01.01 02 01 99	Other Crops (Specify.)	155				
01.01 02 02 00	Soils	155				
01.01 02 03 00	Nutrition (See also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)	155				
01.01 02 04 00	Genetics (See also Major Aspects of the Biological Sciences, 13.02 00 14 00, *Genetics*, under NATURAL SCIENCES.)	155				
01.01 02 05 00	Physiology (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)	155				
01.01 02 06 00	Plant Pathology	155				
01.01 02 07 00	Entomology	155				
01.01 02 08 00	Plant Disease and Pest Control (use of)	155				
01.01 02 08 01	Insecticides	155				
01.01 02 08 02	Fungicides, Bactericides, Viricides, and Nematocides	155				
01.01 02 08 03	Herbicides	155				
01.01 02 08 04	Rodenticides	155				
01.01 02 08 05	Nonchemical Controls	155				
01.01 02 08 06	Plant Genetic Resistance (See also 01.01 02 04 00 *Genetics*, above.)	155				
01.01 02 08 99	Other Plant Disease and Pest Control	155				
01.01 02 09 00	Environmental Biology	155				
01.01 02 99 00	Other Plant Science (Specify.)	155				
01.01 03 00 00	Farm Mechanics (See the category 01.03 00 00 00 *Agricultural Mechanics*.)	155				
01.01 04 00 00	Farm Business Management	155				
01.01 04 01 00	Farm Accounts (See also the categories 03.01 00 00 00 *Accounting* and 03.03 00 00 00 *Bookkeeping*, under BUSINESS.)	155				
01.01 04 02 00	Performance Records	155				
01.01 04 03 00	Budgeting and Analysis	155				
01.01 04 04 00	Manpower Utilization	155				
01.01 04 05 00	Purchasing and Marketing	156				
01.01 04 06 00	Financial and Legal Management	156				
01.01 04 07 00	Farm Organizations	156				
01.01 04 08 00	Government Programs	156				
01.01 04 99 00	Other Farm Business Management (Specify.)	156				
01.01 99 00 00	Other Agricultural Production (Specify.)	156				
01.02 00 00 00	Agricultural Supplies/Services	156				
01.02 01 00 00	Agricultural Chemicals	156				
01.02 02 00 00	Feeds	156				
01.02 03 00 00	Seeds	156				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
01	AGRICULTURE—Continued					
01.02 04 00 00	Fertilizers (Plant Food)	156				
01.02 99 00 00	Other Agricultural Supplies/Services (Specify.)	156				
01.03 00 00 00	Agricultural Mechanics	156				
01.03 01 00 00	Agricultural Power and Machinery (See also 16.01 02 02 00 *Agricultural Machinery and Equipment* under TECHNICAL EDUCATION.)	156				
01.03 02 00 00	Agricultural Structures and Conveniences (See also 16.01 02 03 00 *Agricultural Structures and Conveniences* under TECHNICAL EDUCATION.)	156				
01.03 03 00 00	Soil Management	156				
01.03 04 00 00	Water Management	156				
01.03 05 00 00	Agricultural Mechanics Skills	156				
01.03 06 00 00	Agricultural Construction and Maintenance	156				
01.03 07 00 00	Agricultural Electrification (See also 16.01 02 01 00 *Agricultural Electrification Technology* under TECHNICAL EDUCATION.)	156				
01.03 99 00 00	Other Agricultural Mechanics (Specify.)	157				
01.04 00 00 00	Agricultural Products	157				
01.04 01 00 00	Food Products (Included as 16.02 03 00 00 *Food Processing Technology* under TECHNICAL EDUCATION)	157				
01.04 01 01 00	Meat, Fish, Poultry, Eggs	157				
01.04 01 02 00	Dairy Products (Included as 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION)	157				
01.04 01 03 00	Fruits and Vegetables	157				
01.04 01 04 00	Cereal Grains	157				
01.04 01 05 00	Oilseeds	157				
01.04 01 99 00	Other Food Products (Specify.)	157				
01.04 02 00 00	Nonfood Products	157				
01.04 02 01 00	Cotton	157				
01.04 02 02 00	Tobacco	157				
01.04 02 03 00	Wool	157				
01.04 02 99 00	Other Nonfood Products (Specify.)	157				
01.04 99 00 00	Other Agricultural Products (Specify.)	157				
01.05 00 00 00	Ornamental Horticulture (Production, Processing, Marketing, and Services)	157				
01.05 01 00 00	Arboriculture	157				
01.05 02 00 00	Floriculture (See also 04.05 00 00 00 *Floristry* under DISTRIBUTIVE EDUCATION.)	157				
01.05 03 00 00	Greenhouse Operation and Management	157				
01.05 04 00 00	Landscaping	157				
01.05 05 00 00	Nursery Operation and Management	157				
01.05 06 00 00	Turf Management	157				
01.05 99 00 00	Other Ornamental Horticulture (Specify.)	158				
01.06 00 00 00	Agricultural Resources (Conservation, Utilization, and Services)	158				
01.06 01 00 00	Forests	158				
01.06 02 00 00	Recreation	158				
01.06 03 00 00	Soil	158				
01.06 04 00 00	Wildlife—including game farms and hunting areas	158				
01.06 05 00 00	Water	158				
01.06 06 00 00	Air	158				
01.06 07 00 00	Fish—including farms and hatcheries	158				
01.06 08 00 00	Range	158				
01.06 99 00 00	Other Agricultural Resources (Specify.)	158				
01.07 00 00 00	Forestry (Production, Processing, Management, Marketing, and Services)	158				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
01 AGRICULTURE—Continued						
01.07 01 00 00	Forests (For definition see 01.06 01 00 00 *Forests* under *Agricultural Resources*.)	158				
01.07 02 00 00	Forest Protection	158				
01.07 03 00 00	Logging (harvesting and transporting)	158				
01.07 04 00 00	Wood Utilization	158				
01.07 05 00 00	Recreation (For definition see 01.06 02 00 00 *Recreation* under *Agricultural Resources*.)	158				
01.07 06 00 00	Special Products	158				
01.07 06 01 00	Christmas Trees	158				
01.07 06 02 00	Maple Syrup	158				
01.07 06 03 00	Nuts	158				
01.07 06 99 00	Other Special Products (Specify.)	158				
01.07 99 00 00	Other Forestry (Specify.)	158				
01.99 00 00 00	Other Agriculture (Specify.)	158				
02.00 00 00 00	ART	158				
02.01 00 00 00	Art History and Theory	159				
02.01 01 00 00	Art History	159				
02.01 02 00 00	Art Theory	159				
02.01 03 00 00	Humanities (See also 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.06 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)	159				
02.01 99 00 00	Other Art History and Theory (Specify.)	159				
02.02 00 00 00	Art Studio	159				
02.02 01 00 00	Basic Design	159				
02.02 01 01 00	Two-dimensional Design	159				
02.02 01 02 00	Three-dimensional Design	159				
02.02 02 00 00	Commercial Design (Included as 04.00 00 51 00 *Commercial Design* under DISTRIBUTIVE EDUCATION)	159				
02.02 02 01 00	Advertising and Graphic Design	159				
02.02 02 02 00	Design for the Performing Arts	159				
02.02 02 03 00	Fashion Design	160				
02.02 02 04 00	Technical and Medical Illustration	160				
02.02 02 99 00	Other Commercial Design (Specify.)	160				
02.02 03 00 00	Environmental Design	160				
02.02 03 01 00	Architectural Design	160				
02.02 03 02 00	Industrial and Product Design	160				
02.02 03 03 00	Interior Design	160				
02.02 03 04 00	Landscape Architecture	160				
02.02 03 05 00	Urban Planning	160				
02.02 03 99 00	Other Environmental Design (Specify.)	160				
02.02 04 00 00	Crafts	160				
02.02 04 01 00	Metalwork and Jewelry	160				
02.02 04 02 00	Pottery and Ceramics	160				
02.02 04 03 00	Textiles	160				
02.02 04 99 00	Other Crafts (Specify.)	160				
02.02 05 00 00	Drawing	160				
02.02 06 00 00	Painting	160				
02.02 07 00 00	Photography and Related Media	160				
02.02 08 00 00	Printmaking	160				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
01 ART—Continued						
02.02 09 00 00	Sculpture	160				
02.02 99 00 00	Other Art Studio (Specify.)	160				
02.99 00 00 00	Other Art (Specify.)	160				
03.00 00 00 00	BUSINESS (Various aspects of content in this subject area may also apply to OFFICE OCCUPATIONS.)	160				
03.01 00 00 00	Accounting (Included as 04.00 00 85 00 *Accounting* under DISTRIBUTIVE EDUCATION) (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 01 00 00	Accounting Principles (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 02 00 00	Accounting Systems (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 03 00 00	Advanced Accounting (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 04 00 00	Auditing (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 05 00 00	Cost Accounting (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.02 00 00 00 *Business Data Processing Systems Occupations*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	161				
03.01 06 00 00	C.P.A. Review	162				
03.01 07 00 00	Data Processing Accounting (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 08 00 00	Governmental and Institutional Accounting (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 09 00 00	Intermediate Accounting (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 10 00 00	Managerial Accounting (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 11 00 00	Payroll Accounting (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 12 00 00	Secretarial Accounting (See also 14.08 01 00 00 *Administrative Assistants* under OFFICE OCCUPATIONS.)	162				
03.01 13 00 00	Tax Accounting (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)	162				
03.01 99 00 00	Other Accounting (Specify.)	162				
03.02 00 00 00	Advertising and Sales Promotion (For definition see 04.00 00 44 00 *Advertising and Sales Promotion under* DISTRIBUTIVE EDUCATION.)	162				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03	**BUSINESS—Continued**					
03.02 01 00 00	Advertising Principles (For definition see 04.00 00 45 00 *Advertising Principles* under DISTRIBUTIVE EDUCATION.)	162				
03.02 02 00 00	Advertising Copywriting (For definition see 04.00 00 47 00 *Advertising Copywriting* under DISTRIBUTIVE EDUCATION.)	162				
03.02 03 00 00	Advertising Media and Campaigns (For definition see 04.00 00 46 00 *Advertising Campaigns* and 04.00 00 49 00 *Advertising Media* under DISTRIBUTIVE EDUCATION.)	162				
03.02 04 00 00	Direct Mail Advertising (For definition see 04.00 00 52 00 *Direct Mail Advertising* under DISTRIBUTIVE EDUCATION.)	162				
03.02 99 00 00	Other Advertising and Sales Promotion (Specify.)	162				
03.03 00 00 00	Bookkeeping	162				
03.03 01 00 00	Bookkeeping, First Course (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)	162				
03.03 02 00 00	Bookkeeping, Second Course (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)	163				
03.03 03 00 00	Bookkeeping, Third Course (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)	163				
03.03 04 00 00	Bookkeeping, Fourth Course (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)	163				
03.03 05 00 00	Machine Bookkeeping (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)	163				
03.03 06 00 00	Payroll Record Keeping (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)	163				
03.03 07 00 00	Record Keeping	163				
03.03 99 00 00	Other Bookkeeping (Specify.)	163				
03.04 00 00 00	Budget Control (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS)	163				
03.05 00 00 00	Business Arithmetic or Mathematics (For definition see 11.05 01 00 00 *Business Arithmetic* under MATHEMATICS.)	163				
03.06 00 00 00	Business Communications (See also 04.00 00 88 00 *Communications for Distribution* under DISTRIBUTIVE EDUCATION.) (See also the categories 14.04 00 00 00 *Information Communication Occupations*, 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations*, 14.08 00 00 00 *Supervisory and Administrative Management Occupations*, and 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)	163				
03.06 01 00 00	Business Correspondence	163				
03.06 02 00 00	Report Writing (Included as 04.00 00 97 00 *Report Writing* under DISTRIBUTIVE EDUCATION) (See also 14.04 02 00 00 *Correspondence Clerk* under OFFICE OCCUPATIONS.)	163				
03.06 03 00 00	Spelling and Vocabulary Building	163				
03.06 99 00 00	Other Business Communications (Specify.)	163				
03.07 00 00 00	Business Ethics (This subject matter is also emphasized in various categories under 14.00 00 00 00 OFFICE OCCUPATIONS.)	164				
03.08 00 00 00	Business Finance (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	164				
03.09 00 00 00	Business Law (Included as 04.00 00 87 00 *Business Law* under DISTRIBUTIVE EDUCATION) (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording*, and 14.08					

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03 BUSINESS—Continued						
	00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	164				
03.10 00 00 00	Business Machines (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing,* and the category 14.03 00 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.) (See also specialized subject listings in the BUSINESS subject-matter area.)	164				
03.10 01 00 00	Business Machines, First Course (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)	164				
03.10 02 00 00	Business Machines, Second Course (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)	164				
03.10 03 00 00	Calculating and Listing Machines (For definition see 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)	164				
03.10 04 00 00	Duplicating Machines (See also 14.03 01 00 00 *Duplicating Machine Operators* under OFFICE OCCUPATIONS.)	164				
03.10 99 00 00	Other Business Machines and Appliances (Specify.)	164				
03.11 00 00	Business Psychology (See also 04.00 00 96 00 *Human Relations* under DISTRIBUTIVE EDUCATION.) (See also the category 14.06 00 00 00 *Personnel, Training, and Related Occupations* under OFFICE OCCUPATIONS.)	164				
03.12 00 00 00	Business Statistics (See also the categories 14 01 00 00 00 *Accounting and Computing Occupations,* 14.02 00 00 00 *Business Data Processing Systems Occupations,* 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording,* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	164				
03.13 00 00 00	Office Work Experience	164				
03.14 00 00 00	Clerical Practice (See also the category 14.03 00 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.)	164				
03.15 00 00 00	Consumer Education (For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.)	165				
03.16 00 00 00	Credit and Collections (For definition see 04.00 00 28 00 *Credit and Collections* under DISTRIBUTIVE EDUCATION.)	165				
03.17 00 00 00	Data Processing and Computer Operation (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)	165				
03.17 01 00 00	Introduction to Data Processing (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)	165				
03.17 02 00 00	Data Processing Systems (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)	165				
03.17 03 00 00	Computer-Oriented Mathematics (Data Processing Mathematics) (See also 11.08 00 00 00 *Computer Mathematics* under MATHEMATICS.)	165				
03.17 04 00 00	Computer Programming (See also 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (Included as 16.04 01 00 00 *Computer Programmer* under TECHNICAL EDUCATION)	165				
03.17 05 00 00	Computer Operation: Introduction (See also 14.02 01 00 00 *Computer and Console Operators* under OFFICE OCCUPATIONS.)	165				
03.17 06 00 00	Processing Equipment Operation (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)	165				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03	BUSINESS—Continued					
03.17 06 01 00	Punchcard Data Processing (See also 14.02 02 01 00 *Key Punch and Coding Equipment Operators* under OFFICE OCCUPATIONS.)	165				
03.17 06 02 00	Tabulating Equipment Operation (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)	165				
03.17 06 03 00	Tabulating Machine Wiring (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)	165				
03.17 06 99 00	Other Processing Equipment Operation (Specify.)	166				
03.17 99 00 00	Other Data Processing and Computer Operation (See also 14.02 99 00 00 *Other Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.) (Specify.)	166				
03.18 00 00 00	Economics (For definition see 15.06 00 00 00 *Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.18 01 00 00	Consumer Economics (For definition see 15.06 03 00 00 *Consumer Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.18 02 00 00	Labor Economics (For definition see 15.06 08 00 00 *Resource Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.18 03 00 00	Money and Banking (For definition see 15.06 05 00 00 *Money and Banking* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.18 04 00 00	Principles of Economics (For definition see 15.06 07 00 00 *Principles of Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.18 99 00 00	Other Economics (Specify.)	166				
03.19 00 00 00	Economic Geography (For definition see 15.07 02 00 00 *Human Geography* and 15.07 04 00 00 *Regional Geography* under SOCIAL SCIENCES/SOCIAL STUDIES.)	166				
03.20 00 00 00	Exploratory Business	166				
03.21 00 00 00	Filing (See also 14.03 02 00 00 *File Clerks* under OFFICE OCCUPATIONS.)	166				
03.22 00 00 00	Filing and Record Control (See also 14.03 03 00 00 *General Office Clerks* under OFFICE OCCUPATIONS.)	166				
03.23 00 00 00	General Business or Introduction to Business	166				
03.24 00 00 00	Insurance and Risk (For definition see 04.13 00 00 00 *Insurance* and 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)	166				
03.24 01 00 00	Principles of Insurance (For definition see 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)	166				
03.24 02 00 00	Life Insurance (For definition see 04.00 00 72 00 *Life Insurance* under DISTRIBUTIVE EDUCATION.)	166				
03.24 03 00 00	Property and Casualty Insurance (For definition see 04.00 00 73 00 *Casualty Insurance* and 04.00 00 74 00 *Property Insurance* under DISTRIBUTIVE EDUCATION.)	166				
03.24 99 00 00	Other Insurance (Specify.)	166				
03.25 00 00 00	Investments	166				
03.26 00 00 00	Business and Management Principles (See also specific subject-matter categories in the subject-matter areas of BUSINESS and DISTRIBUTIVE EDUCATION.) (See also 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	166				
03.26 01 00 00	Business Principles (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations,*					

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03 BUSINESS—Continued						
	14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording,* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	167				
03.26 02 00 00	Business Organization and Management (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	167				
03.26 03 00 00	Labor Management Relations (See also the categories 14.06 00 00 00 *Personnel, Training, and Related Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	167				
03.26 04 00 00	Merchandising Management (For definition see 04.00 00 29 00 *Marketing Management, General* under DISTRIBUTIVE EDUCATION.)	167				
03.26 05 00 00	Office Management and Supervision (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	167				
03.26 06 00 00	Personnel Management (For definition see 04.00 00 31 00 *Personnel Management* under DISTRIBUTIVE EDUCATION.) (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)	167				
03.26 07 00 00	Small Business Management (For definition see 04.00 00 33 00 *Small Business Management* under DISTRIBUTIVE EDUCATION.)	167				
03.26 99 00 00	Other Business and Management Principles (Specify.)	167				
03.27 00 00 00	Marketing (For definition see 04.00 00 38 00 *Marketing Research* under DISTRIBUTIVE EDUCATION.)	167				
03.27 01 00 00	Principles of Marketing (For definition see 04.00 00 10 00 *Principles of Marketing* under DISTRIBUTIVE EDUCATION.)	167				
03.27 02 00 00	Industrial Marketing (For definition see 04.00 00 12 00 *Industrial Marketing* under DISTRIBUTIVE EDUCATION.)	167				
03.27 03 00 00	International Marketing (For definition see 04.00 00 13 00 *International Marketing* under DISTRIBUTIVE EDUCATION.)	167				
03.27 99 00 00	Other Marketing (Specify.)	167				
03.28 00 00 00	Office Practice (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	167				
03.29 00 00 00	Personal Development and Human Relations	167				
03.30 00 00 00	Personal Finance	167				
03.31 00 00 00	Real Estate (For definition see 04.17 00 00 00 *Real Estate* under DISTRIBUTIVE EDUCATION.)	167				
03.31 01 00 00	Principles of Real Estate (For definition see 04.00 00 75 00 *Real Estate Principles* under DISTRIBUTIVE EDUCATION.)	167				
03.31 02 00 00	Real Estate Appraisal (For definition see 04.00 00 79 00 *Real Estate Appraisal* under DISTRIBUTIVE EDUCATION.)	167				
03.31 03 00 00	Real Estate Finance (For definition see 04.00 00 80 00 *Real Estate Finance* under DISTRIBUTIVE EDUCATION.)	167				
03.31 04 00 00	Real Estate Law (For definition see 04.00 00 78 00 *Real Estate Law* under DISTRIBUTIVE EDUCATION.)	167				
03.31 05 00 00	Real Estate Management (For definition see 04.00 00 77 00 *Real Estate Management* under DISTRIBUTIVE EDUCATION.)	167				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03. BUSINESS—Continued						
03.31 06 00 00	Real Estate Sales (For definition see 04.00 00 81 00 *Real Estate sales* under DISTRIBUTIVE EDUCATION.)	168				
03.31 99 00 00	Other Real Estate (Specify.)	168				
03.32 00 00 00	Retailing (For definition see 04.00 00 15 00 *Retailing* under DISTRIBUTIVE EDUCATION.)	168				
03.32 01 00 00	Merchandise Information (Product Information) (For definition see 04.00 00 82 00 *Product Information* under DISTRIBUTIVE EDUCATION.)	168				
03.32 02 00 00	Retail Display (For definition see 04.00 00 54 00 *Retail Display* under DISTRIBUTIVE EDUCATION.)	168				
03.32 03 00 00	Retail Merchandising (Selling) (For definition see 04.00 00 23 00 *Retail Merchandising* under DISTRIBUTIVE EDUCATION.)	168				
03.32 04 00 00	Retail Salesmanship (Selling) (For definition see 04.00 00 64 00 *Retail Selling* under DISTRIBUTIVE EDUCATION.)	168				
03.32 05 00 00	Retail Store Management (For definition see 04.00 00 32 00 *Retail Store Management* under DISTRIBUTIVE EDUCATION.)	168				
03.32 99 00 00	Other Retailing (Specify.)	168				
03.33 00 00 00	Salesmanship Principles (See also 04.00 00 62 00 *Salesmanship* under DISTRIBUTIVE EDUCATION.)	168				
03.33 99 00 00	Other Salesmanship (Specify.)	168				
03.34 00 00 00	Shorthand, Stenographic, and Secretarial (See also 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 01 00 00	Machine Shorthand (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 02 00 00	Personal Use Shorthand	168				
03.34 03 00 00	Shorthand Theory, First Course (See also the category 14.07 00 00 00 *Stenographic, Secretarial and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 04 00 00	Shorthand Theory, Second Course (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 05 00 00	Shorthand Dictation (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 06 00 00	Shorthand Speed Building (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 07 00 00	Shorthand Transcription (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	168				
03.34 08 00 00	Machine Transcription (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	169				
03.34 09 00 00	Secretarial Practice (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	169				
03.34 10 00 00	Specialized Shorthand Terminology and Transcription (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	169				
03.34 10 01 00	Legal	169				
03.34 10 02 00	Medical	169				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
03	BUSINESS—Continued					
03.34 10 03 00	Scientific/Technical	169				
03.34 10 99 00	Other Specialized Shorthand Terminology and Transcription (Specify.)	169				
03.34 11 00 00	Specialized Secretarial Practice (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)	169				
03.34 11 01 00	Legal	169				
03.34 11 02 00	Medical	169				
03.34 11 03 00	Scientific/Technical	169				
03.34 11 99 00	Other Specialized Secretarial Practice (legal, medical, scientific/technical) (Specify.)	169				
03.34 99 00 00	Other Shorthand, Stenographic, and Secretarial (Specify.)	169				
03.35 00 00 00	Typewriting (See also the category 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)	169				
03.35 01 00 00	Personal Typwriting	169				
03.35 02 00 00	Production Typewriting (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)	169				
03 35 03 00 00	Typewriting, First Course (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)	169				
03.35 04 00 00	Typewriting, Second Course (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)	169				
03.35 99 00 00	Other Typewriting (Specify.)	169				
03.99 00 00 00	Other Business (Specify.)	170				
04.00 00 00 00	DISTRIBUTIVE EDUCATION	170				
04.01 00 00 00	Advertising Services	170				
04.02 00 00 00	Apparel and Accessories	170				
04.03 00 00 00	Automotive	170				
04.04 00 00 00	Finance and Credit	170				
04.05 00 00 00	Floristry (See also 01.05 02 00 00 *Floriculture* under AGRICULTURE.)	171				
04.06 00 00 00	Food Distribution	171				
04.07 00 00 00	Food Services (See also 09.02 03 00 00 *Food Management, Production, and Services* under HOME ECONOMICS, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)	171				
04.08 00 00 00	General Merchandise	171				
04.09 00 00 00	Hardware, Building Materials, Farm and Garden Supplies and Equipment	171				
04.10 00 00 00	Home Furnishings (See also 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)	171				
04.11 00 00 00	Hotel and Lodging	171				
04.12 00 00 00	Industrial Marketing	171				
04.13 00 00 00	Insurance (Comprises portion of definition of 03.24 00 00 00 *Insurance and Risk* under BUSINESS)	171				
04.14 00 00 00	International Trade	171				
04.15 00 00 00	Personal Services	171				
04.16 00 00 00	Petroleum	171				
04.17 00 00 00	Real Estate (Included as 03.31 00 00 00 *Real Estate* under BUSINESS)	171				
04.18 00 00 00	Recreation and Tourism	171				
04.19 00 00 00	Transportation	172				
04.20 00 00 00	Other Retail Trade (Specify.)	172				
04.31 00 00 00	Other Wholesale Trade (Specify.)	172				
04.99 00 00 00	Other Instructional Programs (Specify.)	172				
04.00 00 01 00	Distribution I	172				
04.00 00 02 00	Distribution I (Cooperative)	172				
04.00 00 03 00	Distribution I (Project)	172				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
04 DISTRIBUTIVE EDUCATION—Continued						
04.00 00 04 00	Distribution II	172				
04.00 00 05 00	Distribution II (Cooperative)–Oriented to Distribution II. (For definition see 04.00 00 02 00 *Distribution I (Cooperative)*.)	172				
04.00 00 06 00	Distribution II (Project)—Oriented to Distribution II. (For definition see 04.00 00 03 00 *Distribution I (Project)*.)	172				
04.00 00 07 00	Distribution III	172				
04.00 00 08 00	Distribution III (Cooperative)—Oriented to Distribution III. (For definition see 04.00 00 02 00 *Distribution I (Cooperative)*.)	172				
04.00 00 09 00	Distribution III (Project)—Oriented to Distribution III. (For definition see 04.00 00 03 00 *Distribution I (Project)*.)	172				
04.00 00 10 00	Principles of Marketing (Included as 03.27 01 00 00 *Principles of Marketing* under BUSINESS)	172				
04.00 00 11 00	Agricultural Marketing	172				
04.00 00 12 00	Industrial Marketing (Included as 03.27 02 00 00 *Industrial Marketing* under BUSINESS)	172				
04.00 00 13 00	International Marketing (Included as 03.27 03 00 00 *International Marketing* under BUSINESS)	173				
04.00 00 14 00	Marketing Trends	173				
04.00 00 15 00	Retailing (Included as 03.32 00 00 00 *Retailing* under BUSINESS)	173				
04.00 00 16 00	Retail Trends	173				
04.00 00 17 00	Wholesaling	173				
04.00 00 18 00	Buying	173				
04.00 00 19 00	Fashion Merchandising	173				
04.00 00 20 00	Fashion Trends	173				
04.00 00 21 00	Merchandise Mathematics	173				
04.00 00 22 00	Retail Buying	173				
04.00 00 23 00	Retail Merchandising (Included as 03.32 03 00 00 *Retail Merchandising (Selling)* under BUSINESS)	173				
04.00 00 24 00	Other Buying (Specify.)	173				
04.00 00 28 00	Credit and Collections (Included as 03.16 00 00 00 *Credit and Collections* under BUSINESS)	173				
04.00 00 29 00	Marketing Management (General) (Included as 03.26 04 00 00 *Merchandising Management* under BUSINESS)	173				
04.00 00 30 00	Midmanagement (General)	173				
04.00 00 31 00	Personnel Management (Included as 03.26 06 00 00 *Personnel Management* under BUSINESS)	173				
04.00 00 32 00	Retail Store Management (Included as 03.32 05 00 00 *Retail Store Management* under BUSINESS)	173				
04.00 00 33 00	Small Business Management (Included as 03.26 07 00 00 *Small Business Management* under BUSINESS)	174				
04.00 00 34 00	Other Marketing Management (Specify.)	174				
04.00 00 38 00	Marketing Research (Included as 03.27 00 00 00 *Marketing* under BUSINESS)	174				
04.00 00 39 00	Market Analysis	174				
04.00 00 40 00	Other Marketing Research (Specify.)	174				
04.00 00 44 00	Advertising and Sales Promotion (Included as 03.02 00 00 00 *Advertising and Sales Promotion* under BUSINESS)	174				
04.00 00 45 00	Advertising Principles (Included as 03.02 01 00 00 *Advertising Principles* under BUSINESS)	174				
04.00 00 46 00	Advertising Campaigns (Comprises portion of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS)	174				
04.00 00 47 00	Advertising Copywriting (Included as 03.02 02 00 00 *Advertising Copywriting* under BUSINESS)	174				
04.00 00 48 00	Advertising Layout	174				
04.00 00 49 00	Advertising Media (Comprises portion of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS)	174				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
04 DISTRIBUTIVE EDUCATION—Continued						
04.00 00 50 00	Advertising Production	174				
04.00 00 51 00	Commercial Design (For definition see 02.02 02 00 00 *Commercial Design* under ART.)	174				
04.00 00 52 00	Direct-Mail Advertising (Included as 03.02 04 00 00 *Direct-Mail Advertising* under BUSINESS)	174				
04.00 00 53 00	Retail Advertising	174				
04.00 00 54 00	Retail Display (Included as 03.32 02 00 00 *Retail Display* under BUSINESS)	174				
04.00 00 55 00	Retail Sales Promotion	174				
04.00 00 56 00	Showcard Techniques	174				
04.00 00 57 00	Other Sales Promotion (Specify.)	175				
04.00 00 61 00	Purchasing	175				
04.00 00 62 00	Salesmanship (Included as 03.33 00 00 00 *Salesmanship Principles* under BUSINESS)	175				
04.00 00 63 00	Direct Sales	175				
04.00 00 64 00	Retail Selling (Included as 03.32 04 00 00 *Retail Salesmanship (Selling)* under BUSINESS)	175				
04.00 00 65 00	Sales Management	175				
04.00 00 66 00	Other Selling (Specify.)	175				
04.00 00 70 00	Transportation	175				
04.00 00 71 00	Principles of Insurance (Included as 03.24 01 00 00 *Principles of Insurance* under BUSINESS)	175				
04.00 00 72 00	Life Insurance (Included as 03.24 02 00 00 *Life Insurance* under BUSINESS)	175				
04.00 00 73 00	Casualty Insurance (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS)	175				
04.00 00 74 00	Property Insurance (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS)	175				
04.00 00 75 00	Real Estate Principles (Included as 03.31 01 00 00 *Principles of Real Estate* under BUSINESS)	175				
04.00 00 76 00	Real Estate Practices	175				
04.00 00 77 00	Real Estate Management—(Included as 03.31 05 00 00 *Real Estate Management* under BUSINESS)	175				
04.00 00 78 00	Real Estate Law (Included as 03.31 04 00 00 *Real Estate Law* under BUSINESS)	175				
04.00 00 79 00	Real Estate Appraisal (Included as 03.31 02 00 00 *Real Estate Appraisal* under BUSINESS)	175				
04.00 00 80 00	Real Estate Finance (Included as 03.31 03 00 00 *Real Estate Finance* under BUSINESS)	176				
04.00 00 81 00	Real Estate Sales (Included as 03.31 06 00 00 *Real Estate Sales* under BUSINESS)	176				
04.00 00 82 00	Product Information (Included as 03.32 01 00 00 *Merchandise Information* under BUSINESS)	176				
04.00 00 83 00	Nontextiles	176				
04.00 00 84 00	Textiles	176				
04.00 00 85 00	Accounting (For definition see 03.01 00 00 00 *Accounting* under BUSINESS.)	176				
04.00 00 86 00	Business-Government Relationships	176				
04.00 00 87 00	Business Law (For definition see 03.09 00 00 00 *Business Law* under BUSINESS.)	176				
04.00 00 88 00	Communications for Distribution (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)	176				
04.00 00 89 00	Economics of Consumption (See also 15.06 03 00 00 *Consumer Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)	176				
04.00 00 90 00	Economics of Marketing	176				
04.00 00 91 00	Effective Store Speech	176				
04.00 00 92 00	Employee Supervision	176				
04.00 00 93 00	Employee Training	176				
04.00 00 94 00	Evaluation Techniques	176				
04.00 00 95 00	Expense Control	176				
04.00 00 96 00	Human Relations (See also 03.11 00 00 00 *Business Psychology* under BUSINESS.)	176				
04.00 00 97 00	Report Writing—(For definition see 03.06 02 00 00 *Report Writing* under BUSINESS.)	177				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
04 DISTRIBUTIVE EDUCATION—Continued						
04.00 00 99 00	Other Subject Matter in Distributive Education (Specify.)	177				
05.00 00 00 00	ENGLISH LANGUAGE ARTS	177				
05.01 00 00 00	Language Skills	177				
05.01 01 00 00	Reading	177				
05.01 01 01 00	Reading Readiness	177				
05.01 01 02 00	Beginning Reading	177				
05.01 01 03 00	Developmental Reading Program	177				
05.01 01 04 00	Basal Reader Program	177				
05.01 01 05 00	Remedial Reading	177				
05.01 01 06 00	Individualized Reading	177				
05.01 01 07 00	Oral Reading	178				
05.01 01 08 00	Initial Teaching Alphabet (ITA)	178				
05.01 01 99 00	Other Reading (Specify.)	178				
05.01 02 00 00	Handwriting (Penmanship)	178				
05.01 02 01 00	Manuscript Writing	178				
05.01 02 02 00	Cursive Writing	178				
05.01 02 99 00	Other Handwriting (Specify.)	178				
05.01 03 00 00	Spelling	178				
05.01 04 00 00	Punctuation	178				
05.01 05 00 00	Listening (See also 05.05 01 04 00 *Listening* under *Speech.*)	178				
05.01 06 00 00	Dictionary Skills	178				
05.01 07 00 00	Reference Skills	178				
05.01 08 00 00	Voice and Diction (For definition see 05.05 03 01 00 *Voice and Diction* under *Speech.*)	178				
05.01 99 00 00	Other Language Skills (Specify.)	178				
05.02 00 00 00	Linguistics	178				
05.02 01 00 00	Phonology	178				
05.02 01 01 00	Phonetics	178				
05.02 01 02 00	Phonemics	178				
05.02 02 00 00	Grammar	178				
05.02 02 01 00	Traditional Grammar	178				
05.02 02 02 00	Structural Grammar (Descriptive)	178				
05.02 02 03 00	Generative Grammar	178				
05.02 02 04 00	Transformational Grammar	178				
05.02 03 00 00	Usage (Functional Grammar)	178				
05.02 04 00 00	History of the English Language	179				
05.02 05 00 00	Dialectology	179				
05.02 06 00 00	Semantics (Semology)	179				
05.02 07 00 00	Study About Language	179				
05.02 99 00 00	Other Linguistics (Specify.)	179				
05.03 00 00 00	Literature	179				
	By Source:	179				
05.03 01 00 00	American Literature	179				
05.03 02 00 00	Biblical Literature	179				
05.03 03 00 00	Classical Literature	179				
05.03 04 00 00	English Literature	179				
05.03 05 00 00	World Literature	179				
05.03 35 00 00	Other Literature by Source (Specify.)	179				
	By Genre:	179				
05.03 36 00 00	Biography	179				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
05	ENGLISH LANGUAGE ARTS—Continued					
05.03 37 00 00	Drama	180				
05.03 38 00 00	Essay	180				
05.03 39 00 00	Fiction	180				
05.03 40 00 00	Poetry	180				
05.03 65 00 00	Other Literature by Genre (Specify.)	180				
05.03 66 00 00	Children's Literature	180				
05.03 67 00 00	Literature for Adolescents	180				
05.03 68 00 00	Myth and Legend	180				
05.03 69 00 00	Humanities (See also 02.01 03 00 00 *Humanities* under ART, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.07 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)	180				
05.03 99 00 00	Other Literature (Specify.)	180				
05.04 00 00 00	Composition	180				
05.04 01 00 00	Theory	180				
05.04 01 01 00	Logic	180				
05.04 01 02 00	Rhetoric (See also 05.05 01 00 00 *Rhetoric and Public Address* under *Speech*.)	181				
05.04 01 03 00	General Semantics	181				
05.04 02 00 00	Writing	181				
05.04 02 01 00	Expository Writing	181				
05.04 02 02 00	Persuasive Writing	181				
05.04 02 03 00	Creative Writing	181				
05.04 02 04 00	Narrative Writing	181				
05.04 03 00 00	Journalism (See also the category 05.05 04 00 00 *Speech Through Mass Media.*)	181				
05.04 03 01 00	Reporting	181				
05.04 03 02 00	Editorial Writing	181				
05.04 03 03 00	Feature Writing	181				
05.04 03 04 00	History of Journalism	181				
05.04 03 99 00	Other Journalism (Specify.)	181				
05.04 99 00 00	Other Composition (Specify.)	181				
05.05 00 00 00	Speech	181				
05.05 01 00 00	Rhetoric and Public Address (See also 05.04 01 02 00 *Rhetoric* under *Composition*.)	181				
05.05 01 01 00	Public Speaking	181				
05.05 01 02 00	Argumentation and Debate (See also the category 05.04 02 00 00 (*Writing*.)	181				
05.05 01 03 00	Communication Theory	182				
05.05 01 04 00	Listening (See also 05.01 05 00 00 *Listening* under *Language Skills*.)	182				
05.05 01 05 00	Discussion	182				
05.05 01 06 00	Speech Criticism	182				
05.05 01 07 00	Parliamentary Procedure	182				
05.05 01 08 00	Persuasion	182				
05.05 01 99 00	Other Rhetoric and Public Address (Specify.)	182				
05.05 02 00 00	Oral Interpretation of Literature	182				
05.05 02 01 00	Choral Speech	182				
05.05 02 02 00	Readers' Theatre	182				
05.05 03 00 00	Speech Improvement	182				
05.05 03 01 00	Voice and Diction	182				
05.05 03 99 00	Other Speech Improvement (Specify.)	182				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
05	ENGLISH LANGUAGE ARTS—Continued					
05.05 04 00 00	Speech Through Mass Media	182				
05.05 04 01 00	Radio and Television	182				
05.05 04 02 00	Film	182				
05.05 99 00 00	Other Speech (Specify.)	182				
05.06 00 00 00	Dramatic Arts	182				
05.06 01 00 00	Acting	182				
05.06 02 00 00	Dramatic Literature	182				
05.06 03 00 00	Creative Dramatics	182				
05.06 04 00 00	Play Production	182				
05.06 05 00 00	Playwriting	182				
05.06 06 00 00	Technical Theatre and Design	182				
05.06 07 00 00	Theatre Criticism	182				
05.06 08 00 00	Theatre History	182				
05.06 99 00 00	Other Dramatic Arts (Specify.)	182				
05.99 00 00 00	Other English Language Arts (Specify.)	183				
06.00 00 00 00	FOREIGN LANGUAGES*	183				
06.01 00 00 00	Classical Languages*	183				
06.01 01 00 00	Arabic (classical)	183				
06.01 02 00 00	Chinese (classical)	183				
06.01 03 00 00	Greek (classical)	183				
06.01 04 00 00	Hebrew (classical/Biblical)	183				
06.01 05 00 00	Latin (classical)	183				
06.01 99 00 00	Other Classical Languages (Specify.**)	183				
	Selected Emphases:	183				
06.01 00 01 00	Culture	183				
06.01 00 02 00	Listening Comprehension	183				
06.01 00 03 00	Reading	183				
06.01 00 04 00	Speaking	183				
06.01 00 05 00	Study of Literature	183				
06.01 00 06 00	Translation	183				
06.01 00 07 00	Writing	183				
06.01 00 99 00	Other Skills, Knowledge, and Understanding (Specify.)	183				
06.02 00 00 00	Modern Foreign Languages*	183				
06.02 01 00 00	Arabic, Modern Standard	183				
06.02 02 00 00	Arabic, colloquial (Specify dialect.)	184				
06.02 03 00 00	Chinese, modern Mandarin	184				
06.02 04 00 00	Chinese, Cantonese	184				
06.02 05 00 00	Czech	184				
06.02 06 00 00	Danish	184				
06.02 07 00 00	English as a foreign language	184				
06.02 08 00 00	French	184				
06.02 09 00 00	German	184				
06.02 10 00 00	Greek, modern	184				
06.02 11 00 00	Hawaiian	184				
06.02 12 00 00	Hebrew, modern (Israeli)	184				
06.02 13 00 00	Italian	184				
06.02 14 00 00	Japanese	184				
06.02 15 00 00	Norwegian	184				

---

* General Language designates a course, complete in itself, offering orientation to the study of language, to the culture it represents, to the story of language, and is designed for pupils who have little or no previous experience in foreign languages. All such courses properly belong in the area of ENGLISH LANGUAGE ARTS. Among the titles possible for such courses are these: Comparative Language, Experimental Language, Exploratory Language, General Language, Introductory Language, Introduction to Language, Language Background, Language Culture, Language Orientation, Language Survey, Latin Derivatives, Latin and Greek Derivatives, Mythology, Principles of Languages, and Word Cues.

** VIZ. Chapter 6, p. 183 re definition of Classical Languages.

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
06	FOREIGN LANGUAGES—Continued					
06.02 16 00 00	Polish	184				
06.02 17 00 00	Portuguese	184				
06.02 18 00 00	Russian	184				
06.02 19 00 00	Spanish	184				
06.02 20 00 00	Swedish	184				
06.02 99 00 00	Other Modern Foreign Languages* (Specify.)	184				
	Selected Emphases:	184				
06.02 00 01 00	Culture	184				
06.02 00 02 00	Listening Comprehension	184				
06.02 00 03 00	Reading	184				
06.02 00 04 00	Speaking	184				
06.02 00 05 00	Study of Literature	184				
06.02 00 06 00	Translation	184				
06.02 00 07 00	Writing	184				
06.02 00 99 00	Other Skills, Knowledge, and Understanding (Specify.)	184				
06.03 00 00 00	Humanities (See also 02.01 03 00 00 *Humanities* under ART; 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS; 12.06 00 00 00 *Humanities* under MUSIC; and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)	184				
07.00 00 00 00	HEALTH OCCUPATIONS EDUCATION	184				
	(Health occupations for which definitive, formal educational programs have been instituted at less than the baccalaureate level)	185				
07.01 00 00 00	Dental	185				
07.01 01 00 00	Dental Assisting	185				
07.01 02 00 00	Dental Hygiene (Associate Degree) (Included as 16.03 01 00 00 *Dental Hygiene* (*Associate Degree*) under TECHNICAL EDUCATION)	185				
07.01 03 00 00	Dental Laboratory Technology	185				
07.01 99 00 00	Other Dental (Specify.)	185				
07.02 00 00 00	Medical Laboratory Technology	185				
07.02 01 00 00	Cytology (Cytotechnology)	185				
07.02 02 00 00	Histology	186				
07.02 03 00 00	Medical Laboratory Assisting (Included as 16.03 03 00 00 *Medical Laboratory Assisting* under TECHNICAL EDUCATION)	186				
07.02 04 00 00	Hematology	186				
07.02 99 00 00	Other Medical Laboratory Technology (Specify.)	186				
07.03 00 00 00	Nursing	186				
07.03 01 00 00	Nursing (Associate Degree) (Included as 16.03 05 00 00 *Nursing* (*Associate Degree*) under TECHNICAL EDUCATION)	186				
07.03 02 00 00	Practical (Vocational) Nursing	186				
07.03 03 00 00	Nursing Assistance (Aide)	186				
07.03 04 00 00	Psychiatric Aide	186				
07.03 05 00 00	Surgical Technician (Operating Room Technician)	186				
07.03 06 00 00	Obstetrical Technician	186				
07.03 07 00 00	Home Health Aide	186				
07.03 08 00 00	School Health Aide	186				
07.03 99 00 00	Other Nursing (Specify.)	186				
07.04 00 00 00	Rehabilitation	186				
07.04 01 00 00	Occupational Therapy	186				
07.04 02 00 00	Physical Therapy	186				
07.04 03 00 00	Prosthetics	186				
07.04 04 00 00	Orthotics	186				
07.04 99 00 00	Other Rehabilitation (Specify.)	186				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
07 HEALTH OCCUPATIONS EDUCATION—Continued						
07.05 00 00 00	Radiologic	187				
07.05 01 00 00	Radiologic Technology (X-ray) (Included as 16.03 04 00 00 *Radiologic Technology* under TECHNICAL EDUCATION)	187				
07.05 02 00 00	Radiation Therapy	187				
07.05 03 00 00	Nuclear Medical Technology	187				
07.05 99 00 00	Other Radiologic (Specify.)	187				
07.06 00 00 00	Ophthalmic	187				
07.06 01 00 00	Ophthalmic Dispensing	187				
07.06 02 00 00	Orthoptics	187				
07.06 03 00 00	Optometrist Assistant	187				
07.06 99 00 00	Other Ophthalmic (Specify.)	187				
07.07 00 00 00	Environmental Health	187				
07.07 01 00 00	Environmental Health Assistant	187				
07.07 02 00 00	Radiological Health Technician	187				
07.07 03 00 00	Sanitarian Assistant	187				
07.07 99 00 00	Other Environmental Health (Specify.)	187				
07.08 00 00 00	Mental Health Technology	187				
07.08 01 00 00	Mental Health Technician	187				
07.08 02 00 00	Mental Retardation Aide	187				
07.08 99 00 00	Other Mental Health Technology (Specify.)	187				
07.09 00 00 00	Miscellaneous Health Occupations Education	187				
07.09 01 00 00	Electroencephalograph Technician (Included as 16.03 02 00 00 *Electroencephalograph Technician* under TECHNICAL EDUCATION)	187				
07.09 02 00 00	Electrocardiograph Technician	188				
07.09 03 00 00	Inhalation Therapy	188				
07.09 04 00 00	Medical Assistant (Assistant in physician's office)	188				
07.09 05 00 00	Central Supply Technician	188				
07.09 06 00 00	Community Health Aide	188				
07.09 07 00 00	Medical Emergency Technician	188				
07.09 08 00 00	Food Service Supervisor	188				
07.09 09 00 00	Mortuary Science	188				
07.09 10 00 00	Orthopedic Assisting	188				
07.99 00 00 00	Other Health Occupations Education (Specify.)	188				
08.00 00 00 00	HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION	188				
08.01 00 00 00	Health	189				
08.01 01 00 00	Community Health	189				
08.01 02 00 00	Consumer Health	189				
08.01 03 00 00	Disease Prevention and Control: Communicable and Chronic	189				
08.01 04 00 00	Environmental Health	189				
08.01 05 00 00	Family Life Education (including Sex Education)	189				
08.01 06 00 00	First Aid	189				
08.01 07 00 00	Growth and Development	189				
08.01 08 00 00	Harmful Substances	189				
08.01 09 00 00	Health Careers	189				
08.01 10 00 00	Health Maintenance and Care	189				
08.01 10 01 00	Foods and Nutrition (For definition see 09.01 07 00 00 *Foods and Nutrition* under HOME ECONOMICS.)	189				
08.01 10 02 00	Dental Health	189				
08.01 10 03 00	Physical Fitness: exercise, sleep, rest, relaxation, and recreation	189				
08.01 10 04 00	Personal Grooming and Body Care	189				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
08	HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued					
08.01 10 05 00	Mental Health	189				
08.01 10 99 00	Other Health Maintenance and Care (Specify.)	190				
08.01 11 00 00	International Health	190				
08.01 99 00 00	Other Health (Specify.)	190				
08.02 00 00 00	Safety in Daily Living	190				
08.02 01 00 00	Explosives (For definition see 21.02 02 00 00 *Explosives* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 02 00 00	Firearms	190				
08.02 03 00 00	Fire Safety	190				
08.02 04 00 00	Holiday and Vacation Safety	190				
08.02 05 00 00	Personal Responsibility in Unsupervised Activities (Included as 21.02 04 00 00 *Personal Responsibility in Unsupervised Activities* under SAFETY AND DRIVER EDUCATION)	190				
08.02 06 00 00	Safety in the Home (Included as 21.02 05 00 00 *Safety in the Home* under SAFETY AND DRIVER EDUCATION)	190				
08.02 07 00 00	Safety in Physical Education and Recreation	190				
08.02 08 00 00	School Safety (Included as 21.02 06 00 00 *School Safety* under SAFETY AND DRIVER EDUCATION)	190				
08.02 09 00 00	Traffic Safety (For definition see 21.02 07 00 00 *Traffic Safety* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 09 01 00	Bicycle, Motor Bike, other (For definition see 21.02 07 01 00 *Bicycle, Motor Bike, other* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 09 02 00	Passenger (For definition see 21.02 07 02 00 *Passenger* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 09 03 00	Pedestrian (For definition see 21.02 07 03 00 *Pedestrian* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 09 04 00	Student Patrol (For definition see 21.02 07 04 00 *Student Patrol* under SAFETY AND DRIVER EDUCATION.)	190				
08.02 09 99 00	Other Traffic Safety (Specify.)	190				
08.02 10 00 00	Vocational and Occupational Safety (Included as 21.02 08 00 00 *Vocational and Occupational Safety* under SAFETY AND DRIVER EDUCATION)	190				
08.02 11 00 00	Water Safety	191				
08.02 99 00 00	Other Safety in Daily Living (Specify.)	191				
08.03 00 00 00	Physical Education	191				
08.03 01 00 00	Adapted Physical Education	191				
08.03 02 00 00	Aquatics	191				
08.03 02 01 00	Diving	191				
08.03 02 02 00	Lifesaving	191				
08.03 02 03 00	Skin and Scuba Diving	191				
08.03 02 04 00	Small crafts	191				
08.03 02 05 00	Surfing	191				
08.03 02 06 00	Swimming	191				
08.03 02 07 00	Synchronized Swimming	191				
08.03 02 08 00	Water Games	191				
08.03 02 09 00	Waterskiing	191				
08.03 02 99 00	Other Aquatics (Specify.)	191				
08.03 03 00 00	Body Dynamics	191				
08.03 03 01 00	Conditioning Exercises	191				
08.03 03 02 00	Fundamental Movements	191				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
08	HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued					
08.03 03 03 00	Individual Self-testing Events	191				
08.03 03 04 00	Posture Education	191				
08.03 03 99 00	Other Body Dynamics (Specify.)	191				
08.03 04 00 00	Dance, Rhythms, and Dramatic Activities	191				
08.03 04 01 00	Dance (Physical Education)	191				
08.03 04 01 01	Folk Dance	192				
08.03 04 01 02	Modern Dance	192				
08.03 04 01 03	Social Dance	192				
08.03 04 01 04	Square Dance	192				
08.03 04 02 00	Rhythms	192				
08.03 04 03 00	Dramatic Activities	192				
08.03 04 03 01	Folk Festival	192				
08.03 04 03 02	Free Play	192				
08.03 04 03 03	Mimetics	192				
08.03 04 03 04	Pageantry	192				
08.03 04 03 05	Story Play	192				
08.03 04 03 99	Other Dramatic Activities (Specify.)	192				
08.03 05 00 00	Group Games, Contests, and Relays	192				
08.03 06 00 00	Individual and Dual Sports	192				
08.03 06 01 00	Archery	192				
08.03 06 02 00	Badminton	192				
08.03 06 03 00	Bowling	192				
08.03 06 04 00	Fencing	192				
08.03 06 05 00	Golf	192				
08.03 06 06 00	Handball	192				
08.03 06 07 00	Tennis	192				
08.03 06 08 00	Track and Field	192				
08.03 06 09 00	Wrestling	192				
08.03 06 99 00	Other Individual and Dual Sports (Specify.)	192				
08.03 07 00 00	Outdoor Recreational Activities	192				
08.03 07 01 00	Camping	192				
08.03 07 02 00	Cycling	192				
08.03 07 03 00	Fishing	192				
08.03 07 04 00	Hunting	192				
08.03 07 04 01	Bow Hunting	192				
08.03 07 04 02	Rifle Hunting	192				
08.03 07 04 03	Shotgun Hunting	192				
08.03 07 04 99	Other Hunting (Specify.)	192				
08.03 07 05 00	Ice Skating	192				
08.03 07 06 00	Orienteering	192				
08.03 07 07 00	Riding	192				
08.03 07 08 00	Skin and Scuba Diving	192				
08.03 07 09 00	Small Crafts	192				
08.03 07 09 01	Boating	192				
08.03 07 09 02	Canoeing	192				
08.03 07 09 03	Rowing	192				
08.03 07 09 04	Sailing	192				
08.03 07 09 99	Other Small Crafts (Specify.)	192				
08.03 07 10 00	Snowskiing	192				
08.03 07 10 01	Cross-country Skiing	192				
08.03 07 10 02	Downhill Skiing	192				
08.03 07 10 03	Jump Skiing	192				
08.03 07 11 00	Surfing	192				
08.03 07 12 00	Waterskiing	192				
08.03 07 99 00	Other Outdoor Recreational Activities (Specify.)	192				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
08	HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued					
08.03 08 00 00	Stunts, Tumbling, and Gymnastics	192				
08.03 08 01 00	Balance Beam	192				
08.03 08 02 00	Building Pyramids	192				
08.03 08 03 00	Parallel Bars	192				
08.03 08 04 00	Horizontal Bars	192				
08.03 08 05 00	Rings	192				
08.03 08 06 00	Ropes	192				
08.03 08 07 00	Side Horse	192				
08.03 08 08 00	Trampoline	192				
08.03 08 99 00	Other Stunts, Tumbling, and Gymnastics (Specify.)	192				
08.03 09 00 00	Team Sports	193				
08.03 09 01 00	Baseball	193				
08.03 09 02 00	Basketball	193				
08.03 09 03 00	Cross Country	193				
08.03 09 04 00	Curling	193				
08.03 09 05 00	Field Hockey	193				
08.03 09 06 00	Football	193				
08.03 09 07 00	Ice Hockey	193				
08.03 09 08 00	Lacrosse	193				
08.03 09 09 00	Soccer	193				
08.03 09 10 00	Softball	193				
08.03 09 11 00	Speed-a-way	193				
08.03 09 12 00	Speedball	193				
08.03 09 13 00	Volleyball	193				
08.03 09 14 00	Water Polo	193				
08.03 09 99 00	Other Team Sports (Specify.)	193				
08.03 99 00 00	Other Physical Education (Specify.)	193				
08.04 00 00 00	Recreation	193				
08.04 01 00 00	Arts and Crafts	193				
08.04 02 00 00	Communicative Arts	193				
08.04 03 00 00	Hobbies	193				
08.04 04 00 00	Outdoor Recreation	193				
08.04 05 00 00	Performing Arts	193				
08.04 05 01 00	Dance	193				
08.04 05 02 00	Drama	193				
08.04 05 03 00	Music	193				
08.04 05 99 00	Other Performing Arts (Specify.)	193				
08.04 06 00 00	Physical Recreation	193				
08.04 07 00 00	Voluntary Service	193				
08.04 99 00 00	Other Recreation (Specify.)	193				
09.00 00 00 00	HOME ECONOMICS	193				
09.01 00 00 00	Homemaking—Preparation for Personal, Home, and Family Living	194				
09.01 01 00 00	Comprehensive Homemaking or Home Economics	194				
09.01 02 00 00	Child Development	194				
09.01 03 00 00	Clothing and Textiles	194				
09.01 04 00 00	Consumer Education—(For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.) (Emphasis in home economics will be oriented to management of a home and to the welfare of family members.)	194				
09.01 05 00 00	Family Health	194				
09.01 06 00 00	Family Relations	194				
09.01 07 00 00	Foods and Nutrition	194				
09.01 08 00 00	Home Management	194				
09.01 09 00 00	Housing and Home Furnishings	194				
09.01 99 00 00	Other Homemaking (Specify.)	194				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
09 HOME ECONOMICS—Continued						
09.02 00 00 00	Occupational Preparation (Included as 16.05 00 00 00 *Home Economics-related Technology* under TECHNICAL EDUCATION)	194				
09.02 01 00 00	Care and Guidance of Children (Included as 16.05 01 00 00 *Child Care Center Assistant*, 16.05 02 00 00 *Hospital Children's Division Assistant*, and 16.05 03 00 00 *Teacher's Assistant at the Preprimary Level* under TECHNICAL EDUCATION)	195				
09.02 02 00 00	Clothing Management, Production, and Services (See also 17.33 00 00 00 *Textile Production and Fabrication* under TRADE AND INDUSTRIAL OCCUPATIONS.)	195				
09.02 03 00 00	Food Management, Production, and Services (Included as 16.05 04 00 00 *Food Service Supervisor* under TECHNICAL EDUCATION) (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)	195				
09.02 04 00 00	Home Furnishings, Equipment, and Services (Included as 16.05 05 00 00 *Interior Decorator Assistant* and 16.05 06 00 00 *Home Equipment Demonstrator* under TECHNICAL EDUCATION) (See also 04.10 00 00 00 *Home Furnishings* under DISTRIBUTIVE EDUCATION.)	195				
09.02 05 00 00	Institutional and Home Management and Supporting Services	195				
09.02 99 00 00	Other Occupational Preparation (Specify.)	195				
10.00 00 00 00	INDUSTRIAL ARTS	195				
10.01 00 00 00	Construction	195				
10.02 00 00 00	Crafts (Industrial)	195				
10.02 01 00 00	Art Metals	196				
10.02 02 00 00	Ceramics	196				
10.02 03 00 00	Crafts (Industrial)	196				
10.02 04 00 00	Industrial Crafts—(See *Crafts (Industrial)*.)	196				
10.02 05 00 00	Leather	196				
10.02 06 00 00	Textiles	196				
10.02 99 00 00	Other Crafts (Industrial) (Specify.)	196				
10.03 00 00 00	Drafting (See also 17.13 00 00 00 *Drafting Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)	196				
10.03 01 00 00	Architectural Drafting	196				
10.03 02 00 00	Descriptive Geometry	196				
10.03 03 00 00	Drafting	196				
10.03 04 00 00	Drafting Technology	196				
10.03 05 00 00	Engineering Drawing	196				
10.03 06 00 00	Industrial Design (See also 02.02 03 02 00 *Industrial Product Design* under ART.)	196				
10.03 07 00 00	Mechanical Drawing	196				
10.03 08 00 00	Technical Illustration	196				
10.03 99 00 00	Other Drafting (Specify.)	196				
10.04 00 00 00	Electricity/Electronics (See also 17.14 00 00 00 *Electrical Occupations* and 17.15 00 00 00 *Electronics Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)	196				
10.04 01 00 00	Electricity	196				
10.04 02 00 00	Electricity/Electronics	196				
10.04 03 00 00	Electronics	197				
10.04 99 00 00	Other Electricity/Electronics (Specify.)	197				
10.05 00 00 00	Elementary School Industrial Arts	197				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
10	INDUSTRIAL ARTS—Continued					
10.05 01 00 00	Industrial Arts in the Elementary School (Grades or Years K–4)	197				
10.05 02 00 00	Intermediate Industrial Arts Program (Grades or Years 5 and 6)	197				
10.05 99 00 00	Other Elementary School Industrial Arts (Specify.)	197				
10.06 00 00 00	General Industrial Arts (Formerly General Shop)	197				
10.07 00 00 00	Graphic Arts	197				
10.07 01 00 00	Graphic Arts	197				
10.07 02 00 00	Photography	197				
10.07 03 00 00	Photolithography (Photo-offset-lithography or Offset)	197				
10.07 04 00 00	Printing	197				
10.07 99 00 00	Other Graphic Arts (Specify.)	197				
10.08 00 00 00	Home Mechanics	197				
10.09 00 00 00	Industrial Arts Mathematics (For definition see 11.05 03 00 00 *Shop Mathematics* under MATHEMATICS.)	197				
10.10 00 00 00	Industrial Arts Science (Applied Chemistry) (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences* under NATURAL SCIENCES.)	197				
10.11 00 00 00	Industrial Arts Science (Applied Physics) (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences* under NATURAL SCIENCES.)	197				
10.12 00 00 00	Industrial Materials and Processes	198				
10.12 01 00 00	Fluid Power	198				
10.12 02 00 00	Industrial Materials	198				
10.12 03 00 00	Industrial Materials and Processes	198				
10.12 04 00 00	Industrial Processes	198				
10.12 05 00 00	Instrumentation	198				
10.12 06 00 00	Numerical Control	198				
10.12 99 00 00	Other Industrial Materials and Processes (Specify.)	198				
10.13 00 00 00	Manufacturing	198				
10.14 00 00 00	Metals	198				
10.14 01 00 00	Metals	198				
10.14 02 00 00	Metal Machining (Metal Shop)	198				
10.14 03 00 00	Metal Technology	198				
10.14 04 00 00	Sheet Metal	198				
10.14 05 00 00	Welding	198				
10.14 99 00 00	Other Metals (Specify.)	198				
10.15 00 00 00	Plastics	198				
10.15 01 00 00	Plastics	198				
10.15 02 00 00	Plastics Technology	198				
10.15 99 00 00	Other Plastics (Specify.)	198				
10.16 00 00 00	Power/Automotive Mechanics (See also 16.01 04 00 00 *Automotive Technology* under TECHNICAL EDUCATION, and 17.03 00 00 00 *Automotive Services* under TRADE AND INDUSTRIAL OCCUPATIONS.)	198				
10.16 01 00 00	Automotive Mechanics	199				
10.16 02 00 00	Power/Automotive Mechanics	199				
10.16 03 00 00	Power Mechanics	199				
10.16 04 00 00	Transportation	199				
10.16 99 00 00	Other Power/Automotive Mechanics (Specify.)	199				
10.17 00 00 00	Research and Development	199				
10.18 00 00 00	Service Industries	199				
10.19 00 00 00	Woods	199				
10.19 01 00 00	Woods	199				
10.19 02 00 00	Woods Technology	199				
10.19 99 00 00	Other Woods (Specify.)	199				
10.99 00 00 00	Other Industrial Arts (Specify.)	199				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
11.00 00 00 00	MATHEMATICS	199				
11.01 00 00 00	Elementary School Mathematics (K–6)—(Topics from which selections may be made for describing the subject matter are listed in chapter 6 under 11.01 00 00 00 *Elementary School Mathematics*.)	200				
11.02 00 00 00	Mathematics (7th and 8th grades)—(Topics from which selections may be made for describing the subject matter are listed under each of the following subheadings in chapter 6 under 11.02 00 00 00 *Mathematics (7th and 8th grades)*.)	200				
11.02 01 00 00	Arithmetic	200				
11.02 02 00 00	Geometry	200				
11.02 03 00 00	Algebra and Statistics	201				
11.03 00 00 00	Algebra—(Topics from which selections may be made for describing the subject matter in 11.03 01 00 00 *First-*, 11.03 02 00 00 *Second-*, and 11.03 03 00 00 *Third-year Algebra*, are listed under 11.03 00 00 00 *Algebra* in chapter 6.)	201				
11.03 01 00 00	First-year	201				
11.03 02 00 00	Second-year	201				
11.03 03 00 00	Third-year	201				
11.03 04 00 00	College Algebra (Subject matter is the same as or similar to 11.03 03 00 00 *Algebra—Third-year* and/or 11.09 00 00 00 *Elementary Functions*.)	202				
11.03 05 00 00	Intermediate Algebra (Subject matter is the same as or similar to 11.03 02 00 00 *Algebra—Second-year*.)	202				
11.03 06 00 00	Linear Algebra	202				
11.03 99 00 00	Other Algebra (Specify.)	202				
11.04 00 00 00	Algebra and Trigonometry (integrated) (Topics from which selections may be made for describing the subject matter are listed under 11.04 00 00 00 *Algebra and Trigonometry (integrated)* in chapter 6.)	202				
11.05 00 00 00	Applied Mathematics	202				
11.05 01 00 00	Business Arithmetic (Included as 03.05 00 00 00 *Business Arithmetic or Mathematics* under BUSINESS)	202				
11.05 02 00 00	Consumer Mathematics	202				
11.05 03 00 00	Shop Mathematics (Included as 10.09 00 00 00 *Industrial Arts Mathematics* under INDUSTRIAL ARTS)	202				
11.05 99 00 00	Other Applied Mathematics (Specify.)	202				
11.06 00 00 00	Calculus—(Topics from which selections may be made for describing the subject matter in 11.06 01 00 00 *First-* and 11.06 02 00 00 *Second-year Calculus* are listed under 11.06 00 00 00 *Calculus* in chapter 6.)	202				
11.06 01 00 00	First-year	203				
11.06 02 00 00	Second-year	203				
11.07 00 00 00	Calculus with Analytical Geometry	203				
11.08 00 00 00	Computer Mathematics—(Topics from which selections may be made for describing the subject matter are listed under 11.08 00 00 00 *Computer Mathematics* in chapter 6.) (See also 03.17 03 00 00 *Computer-oriented Mathematics (Data-processing Mathematics)* under BUSINESS.)	203				
11.09 00 00 00	Elementary Functions—(Topics from which selections may be made for describing the subject matter are listed under 11.09 00 00 00 *Elementary Functions* in chapter 6.)	203				
11.10 00 00 00	First-year College Mathematics for Elementary School Teachers—(Topics from which selections may be made for describing the subject matter are listed under 11.10 00 00 00 *First-year College Mathematics for Elementary School Teachers* in chapter 6.)	203				

Classification of items of information	Definitio page No.	Type of instructional program			
		Elementary	Secondary	Junior College	Adult education
11 MATHEMATICS—Continued					
11.11 00 00 00 General Mathematics—(Topics from which selections may be made to describe subject matter in 11.11 01 00 00 *First-*, 11.11 02 00 00 *Second-*, 11.11 03 00 00 *Third-*, and 11.11 04 00 00 *Fourth-year General Mathematics* are listed under 11.11 00 00 00 *General Mathematics* in chapter 6.)	203				
11.11 01 00 00 First-year	203				
11.11 02 00 00 Second-year	204				
11.11 03 00 00 Third-year	204				
11.11 04 00 00 Fourth-year	205				
11.12 00 00 00 Geometry—(Topics from which selections may be made to describe the subject matter are listed under 11.12 00 00 00 *Geometry* in chapter 6.)	206				
11.12 01 00 00 Analytic Geometry—(Topics from which selections may be made to describe the subject matter are listed under 11.12 01 00 00 *Analytic Geometry* in chapter 6.)	206				
11.12 02 00 00 Plane Geometry—(Topics from which selections may be made to describe the subject matter are listed under 11.12 02 00 00 *Plane Geometry* in chapter 6.)	206				
11.12 03 00 00 Plane and Solid Geometry (integrated)—(Topics from which selections may be made to describe the subject matter are listed under 11.12 03 00 00 *Plane and Solid Geometry* (integrated) in chapter 6.)	206				
11.12 04 00 00 Solid Geometry	207				
11.12 99 00 00 Other Geometry (Specify.)	207				
11.13 00 00 00 Introduction to Analysis—(Topics from which selections may be made to describe the subject matter are listed under 11.13 00 00 00 *Introduction to Analysis* in chapter 6.)	207				
11.14 00 00 00 Liberal Arts Mathematics	207				
11.15 00 00 00 Probability and Statistics—(Topics from which selections may be made to describe the subject matter are listed under 11.15 00 00 00 *Probability and Statistics* in chapter 6.)	207				
11.16 00 00 00 Trigonometry—(Topics from which selections may be made to describe the subject matter are listed under 11.16 00 00 00 *Trigonometry* in chapter 6.)	208				
11.99 00 00 00 Other Mathematics (Specify.)	208				
12.00 00 00 00 MUSIC					
12.01 00 00 00 Music (General Education)	208				
12.02 00 00 00 Music Literature and/or History	208				
12.03 00 00 00 Music Theory	208				
12.03 01 00 00 Fundamentals	208				
12.03 02 00 00 Harmony	208				
12.03 99 00 00 Other Music Theory (Specify.)	208				
12.04 00 00 00 Vocal Music	208				
12.04 01 00 00 Choir, Chorus, and/or Glee Club	208				
12.04 01 01 00 Female	208				
12.04 01 02 00 Male	208				
12.04 01 03 00 Mixed	208				
12.04 02 00 00 Vocal Instruction	208				
12.04 02 01 00 Group	209				
12.04 02 02 00 Individual	209				
12.04 03 00 00 Small Vocal Ensembles	209				
12.04 99 00 00 Other Vocal Music (Specify.)	209				
12.05 00 00 00 Instrumental Music	209				

Classification of items of information		Definitio page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
12 MUSIC—Continued						
12.05 01 00 00	Band	209				
12.05 01 01 00	Concert	209				
12.05 01 02 00	Marching	209				
12.05 01 03 00	Stage	209				
12.05 01 99 00	Other Band (Specify.)	209				
12.05 02 00 00	Orchestra	209				
12.05 02 01 00	Chamber	209				
12.05 02 02 00	Full	209				
12.05 02 03 00	String	209				
12.05 02 99 00	Other Orchestra (Specify.)	209				
12.05 03 00 00	Small Instrumental Ensembles	209				
12.05 04 00 00	Instrumental Instruction	209				
12.05 04 01 00	Group	209				
12.05 04 02 00	Individual	209				
12.05 99 00 00	Other Instrumental Music (Specify.)	209				
12.06 00 00 00	Rhythm and Body Movement—(For definition see 08.03 04 02 00 *Rhythms* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	209				
12.07 00 00 00	Humanities—(See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)	209				
12.99 00 00 00	Other Music (Specify.)	209				
13.00 00 00 00	NATURAL SCIENCES	209				
13.01 00 00 00	General Science (including *Elementary School Science*) (For subject matter select from wherever appropriate.)	210				
13.02 00 00 00	Biological Sciences (including *General Biology*) (For subject matter select from wherever appropriate.)	210				
13.02 01 00 00	Botany	210				
13.02 02 00 00	Microbiology	210				
13.02 03 00 00	Zoology	210				
13.02 99 00 00	Other Biological Sciences (Specify.)	210				
	Major Aspects of the Biological Sciences:	210				
13.02 00 01 00	Anatomy	210				
13.02 00 02 00	Anthropology (See also 15.01 06 00 09 *Physical Anthropology* under SOCIAL SCIENCES/SOCIAL STUDIES.)	210				
13.02 00 03 00	Bacteriology	210				
13.02 00 04 00	Behavior	210				
13.02 00 05 00	Biochemistry	210				
13.02 00 06 00	Biometrics	210				
13.02 00 07 00	Biophysics	210				
13.02 00 08 00	Cellular Phenomena (Cytology)	210				
13.02 00 09 00	Conservation (Environment)	210				
13.02 00 10 00	Developmental Biology	210				
13.02 00 11 00	Ecology	210				
13.02 00 12 00	Entomology	210				
13.02 00 13 00	Evolution	210				
13.02 00 14 00	Genetics	210				
13.02 00 15 00	Molecular Biology	210				
13.02 00 16 00	Nature Study	210				
13.02 00 17 00	Nutrition	210				
13.02 00 18 00	Organic Systems	210				
13.02 00 19 00	Origins of Life	210				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
13	NATURAL SCIENCES—Continued					
13.02 00 20 00	Physiology	210				
13.02 00 21 00	Reproduction	210				
13.02 00 22 00	Taxonomy	210				
13.02 00 23 00	Technological Applications	210				
13.02 00 99 00	Other Major Aspects of the Biological Sciences (Specify.)	211				
13.03 00 00 00	Physical Sciences (including *General Physical Science*) (For subject matter select from wherever appropriate.)	211				
13.03 01 00 00	Chemistry	211				
13.03 02 00 00	Physics	211				
13.03 99 00 00	Other Physical Sciences (not including "earth-space sciences") (Specify.)	211				
	Major Aspects of the Physical Sciences:	211				
13.03 00 01 00	Astronomy (For definition see 13.04 01 00 00 *Astronomy* under Earth-Space Sciences.)	211				
13.03 00 02 00	Atomic and Molecular Structure	211				
13.03 00 03 00	Biochemistry (For definition see 13.02 00 05 00 *Biochemistry* under Biological Sciences.)	211				
13.03 00 04 00	Biophysics (For definition see 13.02 00 07 00 *Biophysics* under Biological Sciences.)	211				
13.03 00 05 00	Chemical Bonding	211				
13.03 00 06 00	Chemical Calculations	211				
13.03 00 07 00	Chemical Reactions	211				
13.03 00 08 00	Electricity and Magnetism	211				
13.03 00 09 00	Electronics	211				
13.03 00 10 00	Equilibrium	211				
13.03 00 11 00	Geology (For definition see 13.04 02 00 00 *Geology* under Earth-Space Sciences.)	211				
13.03 00 12 00	Heat	211				
13.03 00 13 00	Inorganic Chemistry	211				
13.03 00 14 00	Kinetic Molecular Theory	211				
13.03 00 15 00	Materials Science	211				
13.03 00 16 00	Measurement	211				
13.03 00 17 00	Mechanics	211				
13.03 00 18 00	Meteorology (For definition see 13.04 03 00 00 *Meteorology* under Earth-Space Sciences.)	211				
13.03 00 19 00	Nuclear Science	211				
13.03 00 20 00	Oceanography (For definition see 13.04 04 00 00 *Oceanography* under Earth-Space Sciences.)	211				
13.03 00 21 00	Optics	211				
13.03 00 22 00	Organic Chemistry	211				
13.03 00 23 00	Periodic Properties	211				
13.03 00 24 00	Physical Chemistry	211				
13.03 00 25 00	Qualitative Analysis	211				
13.03 00 26 00	Quantitative Analysis	212				
13.03 00 27 00	Quantum Mechanics	212				
13.03 00 28 00	Solid State Physics	212				
13.03 00 29 00	Solution Phenomena	212				
13.03 00 30 00	Sound	212				
13.03 00 31 00	Stoichiometry	212				
13.03 00 32 00	Technological Applications	212				
13.03 00 33 00	Thermodynamics	212				
13.03 00 34 00	Wave Phenomena	212				
13.03 00 99 00	Other Aspects of the Physical Sciences (Specify.)	212				
13.04 00 00 00	Earth-Space Sciences (including *General Earth-Space Science*) (For subject matter select from wherever appropriate.)	212				
13.04 01 00 00	Astronomy	212				
13.04 02 00 00	Geology	212				
13.04 03 00 00	Meteorology	212				
13.04 04 00 00	Oceanography	212				
13.04 05 00 00	Space Exploration	212				
13.04 99 00 00	Other Earth-Space Sciences (Specify.)	212				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
13	NATURAL SCIENCES—Continued					
	Major Aspects of the Earth–Space Sciences:	212				
13.04 00 01 00	Aeronautics	212				
13.04 00 02 00	Astronautics	212				
13.04 00 03 00	Biological Interrelationships	212				
13.04 00 04 00	Climatology	212				
13.04 00 05 00	Cosmology	212				
13.04 00 06 00	Earth Changes	212				
13.04 00 07 00	Forces and Motion	212				
13.04 00 08 00	Geochemistry	212				
13.04 00 09 00	Geophysics	212				
13.04 00 10 00	Hydrology	212				
13.04 00 11 00	Instrumentation and Analytical Methods	213				
13.04 00 12 00	Levels of Organization	213				
13.04 00 13 00	Matter-energy Exchange	213				
13.04 00 14 00	Measurement (For definition see 13.03 00 16 00 *Measurement* under Physical Sciences.)	213				
13.04 00 15 00	Paleontology	213				
13.04 00 16 00	Physical Geography	213				
13.04 00 17 00	Soil Science	213				
13.04 00 18 00	Uniformitarianism	213				
13.04 00 19 00	Technological Applications	213				
13.04 00 99 00	Other Aspects of the Earth–Space Sciences (Specify.)	213				
14.00 00 00 00	OFFICE OCCUPATIONS	213				
14.01 00 00 00	Accounting and Computing Occupations (See also the category 03.01 00 00 00 *Accounting*, and 03.03 06 00 00 *Payroll Recordkeeping*, 03.08 00 00 00 *Business Finance*, 03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)	213				
14.01 01 00 00	Accountants (D.O.T. No. 160 series)	214				
14.01 02 00 00	Bookkeepers (D.O.T. No. 210 series) (See also the category 03.03 00 00 00 *Bookkeeping* under BUSINESS.)	214				
14.01 03 00 00	Cashiers (D.O.T. No. 211 series)	214				
14.01 04 00 00	Machine Operators: Billing, Bookkeeping, and Computing (D.O.T. Nos. 214., 215., 216., and 217. series) (See also 03.03 05 00 00 *Machine Bookkeeping* and the category 03.10 00 00 00 *Business Machines* under BUSINESS.)	214				
14.01 05 00 00	Tellers (D.O.T. No. 210. series)	214				
14.01 99 00 00	Other Accounting and Computing Occupations (D.O.T. No. 219. series) (Specify.)	214				
14.02 00 00 00	Business Data Processing Systems Occupations (See also 03.01 02 00 00 *Accounting Systems*, 03.01 05 00 00 *Cost Accounting*, 03.01 07 00 00 *Data Processing Accounting*, 03.12 00 00 00 *Business Statistics*, 03.17 00 00 00 *Data Processing and Computer Operation*, 03.17 01 00 00 *Introduction to Data Processing*, and 03.17 02 00 00 *Data Processing Systems* under BUSINESS.)	214				
14.02 01 00 00	Computer and Console Operators (D.O.T. No. 213. series) (See also 03.17 05 00 00 *Computer Operation: Introduction* under BUSINESS.)	214				
14.02 02 00 00	Peripheral Equipment Operators (D.O.T. No. 213. series) (See also 03.17 06 00 00 *Processing Equipment Operation*, 03.17 06 02 00 *Tabulating Equipment Operation*, and 03.17 06 03 00 *Tabulating Machine Wiring* under BUSINESS.)	214				
14.02 02 01 00	Key Punch and Coding Equipment Operators (D.O.T. No. 213. series) (See also 03.17 06 01 00 *Punch Card Data Processing* under BUSINESS.)	214				
14.02 02 99 00	Other Peripheral Equipment Operators (D.O.T. Nos. 213. and 219. series) (Specify.)	214				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
14	**OFFICE OCCUPATIONS—Continued**					
14.02 03 00 00	Programmers (D.O.T. No. 020. series) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.) (Included as 16.04 01 00 00 *Computer Programmer* under TECHNICAL EDUCATION)	214				
14.02 04 00 00	Systems Analysts (D.O.T. Nos. 012. and 020. series) (Included as 16.04 02 00 00 *Systems Analyst Technology* under TECHNICAL EDUCATION)	215				
14.02 99 00 00	Other Business Data Processing Systems Occupations (D.O.T. No. 223. series) (See also 03.17 99 00 00 *Other Data Processing and Computer Operation* under BUSINESS.)	215				
14.03 00 00 00	Filing, Office Machines, and General Office Clerical Occupations (See also 03.10 00 00 00 *Business Machines* and 03.14 00 00 00 *Clerical Practice* under BUSINESS.)	215				
14.03 01 00 00	Duplicating Machine Operators (D.O.T. No. 207. series) (See also 03.10 04 00 00 *Duplicating Machines* under BUSINESS.)	215				
14.03 02 00 00	File Clerks (D.O.T. No. 206. series) (See also 03.21 00 00 00 *Filing* under BUSINESS.)	215				
14.03 03 00 00	General Office Clerks (D.O.T. No. 219. series) (See also 03.22 00 00 00 *Filing and Record Control* under BUSINESS.)	215				
14.03 99 00 00	Other Filing, Office Machines, and General Office Clerical Occupations (D.O.T. Nos. 208. and 209. series) (Specify.)	215				
14.04 00 00 00	Information Communication Occupations (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)	215				
14.04 01 00 00	Communication Systems Clerks and Operators (D.O.T. Nos. 235. and 236. series)	215				
14.04 02 00 00	Correspondence Clerks (D.O.T. No. 204. series) (See also 03.06 02 00 00 *Report Writing* under BUSINESS.)	215				
14.04 03 00 00	Mail and Postal Clerks (D.O.T. Nos. 231. and 232. series)	215				
14.04 04 00 00	Mail-preparing and Mail-handling Machine Operators (D.O.T. No. 234. series)	216				
14.04 05 00 00	Messengers and Office Boys and Girls (D.O.T. No. 230. series)	216				
14.04 06 00 00	Receptionists and Information Clerks (D.O.T. No. 237. series)	216				
14.04 99 00 00	Other Information Communication Occupations (D.O.T. Nos. 239. and 249. series) (Specify.)	216				
14.05 00 00 00	Materials Support Occupations: Transporting, Storing, and Recording (See also 03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)	216				
14.05 01 00 00	Planning and Production Clerks (D.O.T. No. 221. series)	216				
14.05 02 00 00	Quality Control Clerks (D.O.T. No. 168. series)	216				
14.05 03 00 00	Shipping and Receiving Clerks (D.O.T. No. 222. series)	216				
14.05 04 00 00	Stock and Inventory Clerks (D.O.T. No. 223. series)	216				
14.05 05 00 00	Traffic, Rate, and Transportation Clerks (D.O.T. Nos. 222. and 919. series)	216				
14.05 99 00 00	Other Materials Support Occupations: Transporting, Storing, and Recording Occupations (D.O.T. Nos. 224., 229., and 919. series) (Specify.)	216				
14.06 00 00 00	Personnel, Training, and Related Occupations (See also 03.11 00 00 00 *Business Psychology* and 03.26 03 00 00 *Labor Management Relations* under BUSINESS.)	216				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
14	OFFICE OCCUPATIONS—Continued					
14.06 01 00 00	Educational Assistants and Training Specialists D.O.T. No. 166. series)	216				
14.06 02 00 00	Interviewers and Tests Technicians (D.O.T. Nos. 166. and 249. series)	216				
14.06 03 00 00	Personnel Assistants (D.O.T. Nos. 166. and 205. series)	216				
14.06 99 00 00	Other Personnel, Training, and Related Occupations (D.O.T. Nos. 166., 205., and 249. series)	217				
14.07 00 00 00	Stenographic, Secretarial, and Related Occupations (See also 03.06 00 00 00 *Business Communications*, 03.28 00 00 00 *Office Practice*, and the category 03.34 00 00 00 *Shorthand, Stenographic, and Secretarial* under BUSINESS.)	217				
14.07 01 00 00	Executive Secretary (See also 14.08 01 00 00 *Administrative Assistants* under *Supervisory and Administrative Management Occupations*.)	217				
14.07 02 00 00	Secretaries (D.O.T. No. 201. series)	217				
14.07 03 00 00	Stenographers (D.O.T. No. 202. series)	217				
14.07 99 00 00	Other Stenographic, Secretarial, and Related Occupations (D.O.T. No. 209. series) (Specify.)	217				
14.08 00 00 00	Supervisory and Administrative Management Occupations (See also the category 03.01 00 00 00 *Accounting*; the items 03.04 00 00 00 *Budget Control*, 03.06 00 00 00 *Business Communications*, 03.08 00 00 00 *Business Finance*, 03.09 00 00 00 *Business Law*, and 03.12 00 00 00 *Business Statistics*; and the category 03.26 00 00 00 *Business and Management Principles* under BUSINESS.)	217				
14.08 01 00 00	Administrative Assistants (D.O.T. No. 169. series) (See also 03.01 12 00 00 *Secretarial Accounting* under BUSINESS and 14.07 01 00 00 *Executive Secretary*.)	217				
14.08 02 00 00	Budget Management Analysts (D.O.T. No. 161. series)	217				
14.08 03 00 00	Clerical and Office Supervisors (D.O.T. Nos. 160.–169. series)	217				
14.08 04 00 00	Data-methods and Systems-procedures Analysts (D.O.T. No. 012. series)	217				
14.08 05 00 00	Office Managers and Chief Clerks (D.O.T. No. 169. series)	217				
14.08 99 00 00	Other Supervisory and Administrative Management Occupations (D.O.T. Nos. 160.–169., 188., and 189. series) (Specify.)	217				
14.09 00 00 00	Typing and Related Occupations (See also 03.06 00 00 00 *Business Communications* and the category 03.35 00 00 00 *Typewriting* under BUSINESS.)	217				
14.09 01 00 00	Clerk Typists (D.O.T. No. 209. series)	217				
14.09 02 00 00	Typists (D.O.T. No. 203. series) (See also 03.35 02 00 00 *Production Typewriting*, 03.35 03 00 00 *Typewriting, First Course*, and 03.35 04 00 00 *Typewriting, Second Course*, under BUSINESS.)	218				
14.09 99 00 00	Other Typing and Related Occupations (D.O.T. Nos. 209. and 219. series) (Specify.)	218				
14.99 00 00 00	Other Office Occupations (Specify and list D.O.T. Nos.)	218				
15.00 00 00 00	SOCIAL SCIENCES/SOCIAL STUDIES	218				
15.01 00 00 00	Anthropology	218				
15.01 01 00 00	Archeology	218				
15.01 02 00 00	Cultural (Social) Anthropology	218				
15.01 02 01 00	Acculturation	218				
15.01 02 02 00	American Indians	218				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
15	**SOCIAL SCIENCES/SOCIAL STUDIES—Continued**					
15.01 02 03 00	Community Development	218				
15.01 02 04 00	Culture	218				
15.01 02 05 00	Cultural Change	218				
15.01 02 06 00	Cultural Evolution	218				
15.01 02 07 00	Cultural Psychology	218				
15.01 02 08 00	Cultural Transmission	218				
15.01 02 09 00	Cultural Values	218				
15.01 02 10 00	Folk Societies	218				
15.01 02 11 00	Kinship Systems	218				
15.01 02 12 00	Peasant Societies	218				
15.01 02 13 00	Personality and Culture	218				
15.01 02 14 00	Prehistoric People	218				
15.01 02 15 00	Primitive Peoples, e.g., Bushmen, Eskimos	218				
15.01 02 16 00	Race	218				
15.01 02 17 00	Social, Political, Economic Organization	218				
15.01 02 99 00	Other Topics in Cultural (Social) Anthropology (Specify.)	218				
15.01 03 00 00	Ethnography	218				
15.01 04 00 00	Ethnology	219				
15.01 05 00 00	Ethnoscience	219				
15.01 06 00 00	Physical Anthropology	219				
15.01 06 01 00	Evolution	219				
15.01 06 02 00	Prehistoric People	219				
15.01 06 03 00	Primitive Behavior	219				
15.01 06 04 00	Primitive Peoples, e.g., Bushmen, Eskimos	219				
15.01 06 05 00	Race	219				
15.01 06 99 00	Other Topics in Physical Anthropology (Specify.)	219				
15.01 99 00 00	Other Anthropology (Specify.)	219				
15.02 00 00 00	Area Studies (Multidisciplinary)	219				
15.02 01 00 00	Areas Beyond the United States	219				
15.02 01 01 00	Africa	219				
15.02 01 02 00	Asia	219				
15.02 01 03 00	Australasia	219				
15.02 01 04 00	Canada	219				
15.02 01 05 00	Europe	219				
15.02 01 06 00	Latin America	219				
15.02 01 07 00	Middle East	219				
15.02 01 08 00	Soviet	219				
15.02 01 99 00	Other Areas Beyond the United States (Specify.)	219				
15.02 02 00 00	Regions of the United States	219				
15.02 02 01 00	Midwest	219				
15.02 02 02 00	North Central	219				
15.02 02 03 00	Northeast	219				
15.02 02 04 00	Northwest	219				
15.02 02 05 00	Southeast	219				
15.02 02 06 00	Southwest	219				
15.02 02 99 00	Other Regions of the United States (Specify.)	219				
15.02 03 00 00	Small Areas	219				
15.02 03 01 00	Home State	219				
15.02 03 02 00	Local Community	219				
15.02 03 03 00	School Community	219				
15.02 03 04 00	Classroom Community	219				
15.02 03 05 00	Neighborhood	219				
15.02 03 99 00	Other Small Area (Specify.)	219				
15.02 99 00 00	Other Area Studies (Specify.)	219				
15.03 00 00 00	Citizenship Education	219				
15.04 00 00 00	Conservation–Environmental Education—(See also Major Aspects of the Biological Sciences, 13.02 00 09					

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
15	SOCIAL SCIENCES/SOCIAL STUDIES—Continued					
	00 *Conservation* (*Environment*) under NATURAL SCIENCES.)	219				
15.05 00 00 00	Consumer Education (Included as 03.15 00 00 00 *Consumer Education* under BUSINESS, and 09.01 04 00 00 *Consumer Education* under HOME ECONOMICS)	219				
15.06 00 00 00	Economics (Included as 03.18 00 00 00 *Economics* under BUSINESS)	219				
15.06 01 00 00	Business and Industry Economics	219				
15.06 02 00 00	Comparative Economics	219				
15.06 03 00 00	Consumer Economics (Included as 03.18 01 00 00 *Consumer Economics* under BUSINESS) (See also 04.00 00 89 00 *Economics of Consumption* under DISTRIBUTIVE EDUCATION.)	220				
15.06 04 00 00	History of Economic Thought	220				
15.06 05 00 00	Money and Banking (Included as 03.18 03 00 00 *Money and Banking* under BUSINESS)	220				
15.06 06 00 00	National Income (and components thereof)	220				
15.06 07 00 00	Principles of Economics (Included as 03.18 04 00 00 *Principles of Economics* under BUSINESS)	220				
15.06 08 00 00	Resource Economics (Included as 03.18 02 00 00 *Labor Economics* under BUSINESS)	220				
15.06 99 00 00	Other Economics (Specify.)	220				
15.07 00 00 00	Geography	220				
15.07 01 00 00	Historical Geography	220				
15.07 02 00 00	Human (Cultural) Geography (Comprises portion of definition of 03.19 00 00 00 *Economic Geography* under BUSINESS)	220				
15.07 02 01 00	Cartographic Interpretation	220				
15.07 02 02 00	Circulation Patterns	220				
15.07 02 03 00	Economic Patterns	220				
15.07 02 04 00	Political Patterns	220				
15.07 02 05 00	Population	220				
15.07 02 06 00	Settlement Patterns	220				
15.07 02 99 00	Other Human Geography (Specify.)	220				
15.07 03 00 00	Physical Geography	220				
15.07 03 01 00	Atmosphere: weather, climate	220				
15.07 03 02 00	Biosphere: wild plants, wild animals	220				
15.07 03 03 00	Exosphere, e.g., remote sensing	220				
15.07 03 04 00	Hydrosphere: oceans, other surface water bodies, subsurface water, land ice	220				
15.07 03 05 00	Lithosphere: land forms, minerals, soils	220				
15.07 03 99 00	Other Aspects of Physical Geography (Specify.)	220				
15.07 04 00 00	Regional Geography (Comprises portion of definition of 03.19 00 00 00 *Economic Geography* under BUSINESS)	220				
15.07 04 01 00	Agricultural Regions	220				
15.07 04 02 00	Climatic Regions	220				
15.07 04 03 00	Continental Regions	220				
15.07 04 04 00	Culture Regions	220				
15.07 04 05 00	Landform Regions	220				
15.07 04 06 00	Manufacturing Regions	220				
15.07 04 07 00	Political Regions	220				
15.07 04 08 00	Population (Human) Regions	220				
15.07 04 09 00	Vegetation Regions	220				
15.07 04 99 00	Other Regional Geography (Specify.)	220				
15.07 99 00 00	Other Geography (Specify.)	221				
15.08 00 00 00	History	221				
15.08 01 00 00	American History (including Canada, Latin America, and United States)	221				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued						
15.08 02 00 00	Local History	221				
15.08 03 00 00	Modern History	221				
15.08 04 00 00	State History	221				
15.08 05 00 00	United States History	221				
15.08 06 00 00	Western Civilization	221				
15.08 07 00 00	Nonwestern Civilization	221				
15.08 08 00 00	World Civilization	221				
15.08 09 00 00	World History	221				
15.08 99 00 00	Other History (Specify.)	221				
15.09 00 00 00	Humanities—(See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 12.06 00 00 00 *Humanities* under MUSIC.)	221				
15.10 00 00 00	Philosophy	221				
15.10 01 00 00	Ethics	221				
15.10 02 00 00	History of Philosophy	221				
15.10 03 00 00	Introduction to Philosophy	222				
15.10 04 00 00	Logic (See also 05.04 01 01 00 *Logic* under ENGLISH LANGUAGE ARTS.)	222				
15.10 05 00 00	Metaphysics	222				
15.10 06 00 00	Philosophy of Religion	222				
15.10 99 00 00	Other Philosophy (Specify.)	222				
15.11 00 00 00	Political Science	222				
15.11 01 00 00	American Government	222				
15.11 01 01 00	Constitution, The	222				
15.11 01 99 00	Other American Government (Specify.)	222				
15.11 02 00 00	Comparative Systems	222				
15.11 03 00 00	Contemporary World Affairs	222				
15.11 04 00 00	International Relations	222				
15.11 05 00 00	Political Parties and Public Opinion	222				
15.11 06 00 00	Political Socialization	222				
15.11 07 00 00	Political Theory	222				
15.11 99 00 00	Other Political Science (Specify.)	222				
15.12 00 00 00	Psychology	222				
15.12 01 00 00	Developmental Psychology	222				
15.12 02 00 00	Educational Psychology	222				
15.12 03 00 00	General Psychology	222				
15.12 04 00 00	Psychology of Adjustment	222				
15.12 05 00 00	Social Psychology	222				
15.12 99 00 00	Other Psychology (Specify.)	223				
15.13 00 00 00	Sociology	223				
15.13 01 00 00	Community, The	223				
15.13 01 01 00	Rural Society	223				
15.13 01 02 00	Urban Society	223				
15.13 01 99 00	Other Community (Specify.)	223				
15.13 02 00 00	Public Opinion and Political Sociology	223				
15.13 03 00 00	Socialization	223				
15.13 04 00 00	Social Organization	223				
15.13 04 01 00	Education	223				
15.13 04 02 00	Family	223				
15.13 04 03 00	Religion	223				
15.13 04 99 00	Other Social Organization (Specify.)	223				
15.13 05 00 00	Social Problems	223				
15.13 06 00 00	Social Stratification	223				
15.13 07 00 00	Social Theory	223				
15.13 99 00 00	Other Sociology (Specify.)	223				
15.99 00 00 00	Other Social Sciences/Social Studies (Specify.)	223				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
16.00 00 00 00	TECHNICAL EDUCATION	223				
16.01 00 00 00	Engineering-related Technology	224				
16.01 01 00 00	Aeronautical Technology	224				
16.01 02 00 00	Agricultural Technology	224				
16.01 02 01 00	Agricultural Electrification Technology (See also 01.03 07 00 00 *Agricultural Electrification* under AGRICULTURE.)	224				
16.01 02 02 00	Agricultural Machinery and Equipment Technology (See also 01.03 01 00 00 *Agricultural Power and Machinery* under AGRICULTURE.)	224				
16.01 02 03 00	Agricultural Structures and Conveniences (See also 01.03 02 00 00 *Agricultural Structures and Conveniences* under AGRICULTURE.)	224				
16.01 02 99 00	Other Agricultural Technology (Specify.)	224				
16.01 03 00 00	Architectural Technology (Building Construction)	224				
16.01 04 00 00	Automotive Technology	224				
16.01 05 00 00	Chemical Technology	224				
16.01 06 00 00	Civil Technology	224				
16.01 06 01 00	Roadway Technology	225				
16.01 06 02 00	Sanitation Technology	225				
16.01 06 03 00	Structural Technology	225				
16.01 06 99 00	Other Civil Technology (Specify.)	225				
16.01 07 00 00	Electrical Technology	225				
16.01 08 00 00	Electronic Technology	225				
16.01 09 00 00	Electromechanical Technology	225				
16.01 10 00 00	Environmental-control Technology (See also 17.01 00 00 00 *Air Conditioning* under TRADE AND INDUSTRIAL OCCUPATIONS.)	225				
16.01 10 01 00	Cooling	225				
16.01 10 02 00	Heating	225				
16.01 10 03 00	Refrigeration	225				
16.01 10 99 00	Other Environmental-control Technology (Specify.)	225				
16.01 11 00 00	Industrial Technology	225				
16.01 12 00 00	Instrumentation Technology	225				
16.01 13 00 00	Mechanical Technology	226				
16.01 13 01 00	Energy Conversion	226				
16.01 13 02 00	Machine and Tool Design	226				
16.01 13 03 00	Production	226				
16.01 13 99 00	Other Mechanical Technology (Specify.)	226				
16.01 14 00 00	Metallurgical Technology (See also 17.24 00 00 00 *Metallurgy Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)	226				
16.01 15 00 00	Nuclear Technology	226				
16.01 16 00 00	Petroleum Technology	226				
16.01 17 00 00	Scientific Data Processing	226				
16.01 99 00 00	Other Engineering-related Technology (Specify.)	226				
16.02 00 00 00	Agricultural-related Technology	226				
16.02 01 00 00	Animal Science (For description see 01.01 01 00 00 *Animal Science* under AGRICULTURE.)	226				
16.02 02 00 00	Dairy Technology (For description see 01.01 01 00 00 *Animal Science* and 01.04 01 02 00 *Dairy Products* under AGRICULTURE.)	226				
16.02 03 00 00	Food Processing Technology (For description see 01.04 01 00 00 *Food Products* under AGRICULTURE.)	227				
16.02 04 00 00	Plant Science (For description see 01.01 02 00 00 *Plant Science* under AGRICULTURE.)	227				
16.02 99 00 00	Other Agricultural-related Technology (Specify.)	227				
16.03 00 00 00	Health-related Technology	227				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
16	TECHNICAL EDUCATION—Continued					
16.03 01 00 00	Dental Hygiene (Associate Degree) (For description see 07.01 02 00 00 *Dental Hygiene (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)	227				
16.03 02 00 00	Electroencephalograph Technician (For description see 07.09 01 00 00 *Electroencephalograph Technician* under HEALTH OCCUPATIONS EDUCATION.)	227				
16.03 03 00 00	Medical Laboratory Assisting (For description see 07.02 03 00 00 *Medical Laboratory Assisting* under HEALTH OCCUPATIONS EDUCATION.)	227				
16.03 04 00 00	Radiologic Technology (X-ray) (For description see 07.05 01 00 00 *Radiologic Technology (x-ray)* under HEALTH OCCUPATIONS EDUCATION.)	227				
16.03 05 00 00	Nursing (Associate Degree) (For description see 07.03 01 00 00 *Nursing (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)	227				
16.03 99 00 00	Other Health-related Technology (Specify.)	227				
16.04 00 00 00	Office-related Technology	227				
16.04 01 00 00	Computer Programmer (For description see 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.)	227				
16.04 02 00 00	Systems Analyst Technology (For description see 14.02 04 00 00 *Systems Analysts* under OFFICE OCCUPATIONS.)	227				
16.04 99 00 00	Other Office-related Technology (Specify.)	227				
16.05 00 00 00	Home Economics-related Technology (For description see 09.02 00 00 00 *Occupational Preparation* under HOME ECONOMICS.)	227				
16.05 01 00 00	Child Care Center Assistant (For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)	227				
16.05 02 00 00	Hospital Children's Division Assistant (For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)	227				
16.05 03 00 00	Teacher's Assistant at the Preprimary Level (For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)	227				
16.05 04 00 00	Food Service Supervisor (For description see 09.02 03 00 00 *Food Management, Production, and Services* under HOME ECONOMICS.)	227				
16.05 05 00 00	Interior Decorator Assistant (For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)	227				
16.05 06 00 00	Home Equipment Demonstrator (For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)	227				
16.05 99 00 00	Other Home Economics-related Technology (Specify.)	227				
16.06 00 00 00	Miscellaneous Technical Education	227				
16.06 01 00 00	Commercial Pilot Training	227				
16.06 02 00 00	Fire and Fire Safety Technology	227				
16.06 03 00 00	Forestry Technology	228				
16.06 04 00 00	Oceanographic Technology (Physical, Biological, and Fisheries)	228				
16.06 05 00 00	Police (Law Enforcement and Corrections) Science Technology	228				
16.06 99 00 00	Other Miscellaneous Technical Education (Specify.)	228				
17.00 00 00 00	TRADE AND INDUSTRIAL OCCUPATIONS	228				
17.01 00 00 00	Air Conditioning (See also 16.01 10 00 00 *Environmental-control Technology* under TECHNICAL EDUCATION.)	229				
17.01 01 00 00	Cooling	229				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
17	TRADE AND INDUSTRIAL OCCUPATIONS—Continued					
17.01 02 00 00	Heating	229				
17.01 03 00 00	Ventilating (Filtering and Humidification)	229				
17.01 99 00 00	Other Air Conditioning (Specify.)	229				
17.02 00 00 00	Appliance Repair	229				
17.02 01 00 00	Electrical Appliances	229				
17.02 02 00 00	Gas Appliances	229				
17.03 00 00 00	Automotive Services (See also 10.16 00 00 00 *Power/Automotive Mechanics* under INDUSTRIAL ARTS.)	229				
17.03 01 00 00	Body and Fender	229				
17.03 02 00 00	Mechanics	229				
17.03 03 00 00	Specialization	229				
17.03 99 00 00	Other Automotive Services (Specify.)	229				
17.04 00 00 00	Aviation Occupations	229				
17.04 01 00 00	Aircraft Maintenance	229				
17.04 01 01 00	Air Frame	229				
17.04 01 02 00	Power Plant	230				
17.04 01 99 00	Other Aircraft Maintenance (Specify.)	230				
17.04 02 00 00	Aircraft Operations	230				
17.04 03 00 00	Ground Operations	230				
17.05 00 00 00	Blueprint Reading	230				
17.06 00 00 00	Business Machine Maintenance	230				
17.07 00 00 00	Commercial Art Occupations	230				
17.07 01 00 00	Interior Decorating	230				
17.07 02 00 00	Window Display	230				
17.07 03 00 00	Product Design	230				
17.07 99 00 00	Other Commercial Art Occupations (Specify.)	230				
17.08 00 00 00	Commercial Fishery Occupations	230				
17.08 01 00 00	Seamanship	230				
17.08 02 00 00	Ship and Boat Operation and Maintenance	230				
17.08 99 00 00	Other Commercial Fishery Occupations (Specify.)	230				
17.09 00 00 00	Commercial Photography Occupations	230				
17.09 01 00 00	Photographic Laboratory and Darkroom Occupations	231				
17.09 99 00 00	Other Commercial Photography Occupations (Specify.)	231				
17.10 00 00 00	Construction and Maintenance Trades	231				
17.10 01 00 00	Carpentry	231				
17.10 02 00 00	Electricity	231				
17.10 03 00 00	Heavy Equipment (Construction)	231				
17.10 03 01 00	Maintenance	231				
17.10 03 02 00	Operation	231				
17.10 04 00 00	Masonry	231				
17.10 05 00 00	Painting and Decorating	231				
17.10 06 00 00	Plastering	231				
17.10 07 00 00	Plumbing and Pipefitting	231				
17.10 08 00 00	Drywall Installation	231				
17.10 09 00 00	Glazing	231				
17.10 10 00 00	Roofing	231				
17.10 99 00 00	Other Construction and Maintenance Trades (Specify.)	231				
17.11 00 00 00	Custodial Services	231				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
17	TRADE AND INDUSTRIAL OCCUPATIONS—Continued					
17.12 00 00 00	Diesel Mechanic	232				
17.13 00 00 00	Drafting Occupations (See also 10.03 00 00 00 *Drafting* under INDUSTRIAL ARTS.)	232				
17.14 00 00 00	Electrical Occupations (See also 10.04 00 00 00 *Electricity/Electronics* under INDUSTRIAL ARTS.)	232				
17.14 01 00 00	Industrial Electrician	232				
17.14 02 00 00	Lineman	232				
17.14 03 00 00	Motor Repairman	232				
17.14 99 00 00	Other Electrical Occupations (Specify.)	232				
17.15 00 00 00	Electronics Occupations (See also 10.04 00 00 00 Electricity/Electronics under INDUSTRIAL ARTS.)	232				
17.15 01 00 00	Communications	232				
17.15 02 00 00	Industrial Electronics	232				
17.15 03 00 00	Radio/Television	232				
17.15 99 00 00	Other Electronics Occupations (Specify.)	233				
17.16 00 00 00	Fabric Maintenance Services	233				
17.16 01 00 00	Drycleaning	233				
17.16 02 00 00	Laundering	233				
17.16 99 00 00	Other Fabric-maintenance Services (Specify.)	233				
17.17 00 00 00	Foremanship, Supervision, and Management Development	233				
17.18 00 00 00	General Continuation (For description see X 02 45.23 *General Continuation Class*, page 62.)	233				
17.19 00 00 00	Graphic Arts Occupations	233				
17.19 01 00 00	Composition, Makeup, and Typesetting	233				
17.19 02 00 00	Printing Press Occupations	233				
17.19 03 00 00	Lithography, Photography, and Platemaking	233				
17.19 04 00 00	Photoengraving	233				
17.19 05 00 00	Silk Screen Making and Printing	233				
17.19 06 00 00	Bookbinding	233				
17.19 99 00 00	Other Graphic Arts (Specify.)	233				
17.20 00 00 00	Industrial Atomic Energy Occupations	233				
17.20 01 00 00	Installation, Operation, and Maintenance of Reactors	233				
17.20 02 00 00	Radiography	234				
17.20 03 00 00	Industrial Uses of Radioisotopes	234				
17.20 99 00 00	Other Industrial Atomic Energy Occupations (Specify.)	234				
17.21 00 00 00	Instrument Maintenance and Repair Occupations	234				
17.21 01 00 00	Instruments (other than watches and clocks)	234				
17.21 02 00 00	Watchmaking and Repair	234				
17.22 00 00 00	Maritime Occupations	234				
17.23 00 00 00	Metalworking Occupations	234				
17.23 01 00 00	Foundry	234				
17.23 02 00 00	Machine Shop	234				
17.23 03 00 00	Machine Tool Operation	235				
17.23 04 00 00	Metal Trades (combined)	235				
17.23 05 00 00	Sheet Metal	235				
17.23 06 00 00	Welding and Cutting	235				
17.23 06 01 00	Gas Welding	235				
17.23 06 02 00	Electric Welding	235				
17.23 06 03 00	Combination Welding	235				
17.23 06 04 00	Brazing and Soldering Operations	235				
17.23 06 99 00	Other Welding and Cutting (Specify.)	235				
17.23 07 00 00	Tool and Die Making	235				
17.23 08 00 00	Die Sinking	235				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
17	TRADE AND INDUSTRIAL OCCUPATIONS—Continued					
17.23 09 00 00	Metal Patternmaking	235				
17.23 99 00 00	Other Metalworking Occupations (Specify.)	235				
17.24 00 00 00	Metallurgy Occupations (See also 16.01 14 00 00 *Metallurgical Technology* under TECHNICAL EDUCATION.)	235				
17.26 00 00 00	Personal Services	235				
17.26 01 00 00	Barbering	235				
17.26 02 00 00	Cosmetology	235				
17.26 99 00 00	Other Personal Services (Specify.)	236				
17.27 00 00 00	Plastics Occupations	236				
17.28 00 00 00	Public Service Occupations	236				
17.28 01 00 00	Fireman Training	236				
17.28 02 00 00	Law Enforcement Training	236				
17.28 99 00 00	Other Public Service Occupations (Specify.)	236				
17.29 00 00 00	Quantity Food Occupations (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 09.02 03 00 00 *Food Management, Production, and Services* under HOME ECONOMICS.)	236				
17.29 01 00 00	Baker	236				
17.29 02 00 00	Cook/Chef	236				
17.29 03 00 00	Meat Cutter	236				
17.29 04 00 00	Waiter/Waitress	236				
17.29 99 00 00	Other Quantity Food Occupations (Specify.)	236				
17.30 00 00 00	Refrigeration	236				
17.31 00 00 00	Small Engine Repair (Internal Combustion)	237				
17.32 00 00 00	Stationary Energy Sources Occupations	237				
17.32 01 00 00	Electric Power Generating Plants	237				
17.32 02 00 00	Pumping Plants	237				
17.32 99 00 00	Other Stationary Energy Sources Occupations (Specify.)	237				
17.33 00 00 00	Textile Production and Fabrication (See also 09.02 02 00 00 *Clothing Management, Production, and Services* under HOME ECONOMICS.)	237				
17.33 01 00 00	Dressmaking	237				
17.33 02 00 00	Tailoring	237				
17.33 99 00 00	Other Textile Production and Fabrication (Specify.)	237				
17.34 00 00 00	Leatherworking	237				
17.34 01 00 00	Shoe Manufacturing	237				
17.34 02 00 00	Shoe Repair	237				
17.34 99 00 00	Other Leatherworking (Specify.)	237				
17.35 00 00 00	Upholstering	237				
17.36 00 00 00	Woodworking Occupations	238				
17.36 01 00 00	Millwork and Cabinet Making	238				
17.36 99 00 00	Other Woodworking Occupations (Specify.)	238				
17.99 00 00 00	Other Trade and Industrial Occupations (Specify.)	238				
18.00 00 00 00	GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION	238				
18.01 00 00 00	General Elementary Years or Grades	238				
18.01 01 00 00	Early Elementary Years or Grades: Early Childhood Education	238				
18.01 01 01 00	Preprimary Level	238				

Classification of items of information	Definition page No.	Type of instructional program			
		Elementary	Secondary	Junior College	Adult education
18 GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION—Continued					
18.01 01 02 00 Primary Level (including grades 1, 2, and 3 or equivalent)	238				
18.01 01 99 00 Other Early Elementary Organization (Specify.)	238				
18.01 02 00 00 Intermediate Elementary Level (including years or grades 4, 5, and 6 or equivalent)	238				
18.01 03 00 00 Upper Elementary Level (including years or grades 7 and 8 or equivalent)	238				
18.01 99 00 00 Other Plan for General Elementary Years or Grades (Specify.)	238				
18.02 00 00 00 Middle School Level	238				
18.03 00 00 00 General Secondary Years or Grades	239				
18.03 01 00 00 Junior High School Level	239				
18.03 02 00 00 Senior High School Level	239				
18.03 99 00 00 Other Secondary School Level (Specify.)	239				
19.00 00 00 00 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS	239				
19.01 00 00 00 Communication Skills	239				
19.01 01 00 00 Language Stimulation	239				
19.01 02 00 00 Language Development	239				
19.01 03 00 00 Language Correction	239				
19.01 04 00 00 Speech Stimulation	239				
19.01 05 00 00 Speech Development	239				
19.01 06 00 00 Speech Correction	239				
19.01 07 00 00 Special Communication Methods	240				
19.01 07 01 00 Braille Reading and Writing	240				
19.01 07 02 00 Stimulus Magnification (Vision)	240				
19.01 07 03 00 Stimulus Magnification (Hearing)	240				
19.01 07 04 00 Manual Communication	240				
19.01 07 05 00 Electronic Reproduction	240				
19.01 07 06 00 Typing for Communication	240				
19.01 07 07 00 Speech Reading (Lip Reading)	240				
19.01 07 99 00 Other Special Communication Methods (Specify.)	240				
19.01 99 00 00 Other Communication Skills (Specify.)	240				
19.02 00 00 00 Interpersonal and Behavioral Coping Skills	240				
19.02 01 00 00 Self-concept Development	240				
19.02 02 00 00 Self-concept Reeducation	240				
19.02 03 00 00 Social	240				
19.02 99 00 00 Other Interpersonal and Behavioral Coping Skills (Specify.)	240				
19.03 00 00 00 Motoric Skills	240				
19.03 01 00 00 Dexterity Skills	240				
19.03 01 01 00 Gross Motor Skills	240				
19.03 01 02 00 Fine Motor Skills	240				
19.03 02 00 00 Physical Management	241				
19.03 02 01 00 Self-help Skills	241				
19.03 02 02 00 Use of Devices and Equipment (ordinary and special)	241				
19.03 02 03 00 Personal Safety	241				
19.03 03 00 00 Mobility Training	241				
19.03 03 01 00 Orientation	241				
19.03 03 02 00 Travel	241				
19.03 99 00 00 Other Motoric Skills (Specify.)	241				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
19	DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS—Continued					
19.04 00 00 00	Perceptual Skills (NOTE: include "intersensory"—integration—in this definition.)	241				
19.04 01 00 00	Auditory Training: Stimulation	241				
19.04 02 00 00	Auditory Training: Development	241				
19.04 03 00 00	Auditory Training: Correction	241				
19.04 04 00 00	Tactile and Kinesthetic Stimulation	241				
19.04 05 00 00	Tactile and Kinesthetic Development	241				
19.04 06 00 00	Tactile and Kinesthetic Correction	241				
19.04 07 00 00	Olfactory Stimulation	241				
19.04 08 00 00	Olfactory Development	242				
19.04 09 00 00	Visual Stimulation	242				
19.04 10 00 00	Visual Development	242				
19.04 11 00 00	Visual Correction	242				
19.04 12 00 00	Personal Spatial Relationships	242				
19.04 99 00 00	Other Perceptual Skills (Specify.)	242				
19.05 00 00 00	Vocational and Avocational Skills Development	242				
19.05 01 00 00	Vocational Information	242				
19.05 02 00 00	Prevocational Work Experience	242				
19.05 03 00 00	Specialized Vocational Preparation (Specify vocations.)	242				
19.05 04 00 00	Avocational Information	242				
19.05 05 00 00	Avocational Experience (Therapeutic recreation, e.g., art, dance, drama, and music)	242				
19.05 99 00 00	Other Vocational and Avocational Skills Development (Specify.)	242				
19.99 00 00 00	Other Differentialized Curriculum for Handicapped Pupils (Specify.)	242				
20.00 00 00 00	COCURRICULAR ACTIVITIES Many activities, not included in this classification, may be added locally. The letter *N* may be used to identify activities affiliated with a *national* organization, and the letter *L* for any activities that are *local only*. (See 20.00 00 00 00 COCURRICULAR ACTIVITIES in chapter 6 for the description of how each classified item is treated.) An activity may be placed locally in a category other than the one in which it appears in this classification. As an example, *Folk Music* is in the Social Activities category in this classification; locally, it may be more appropriate in the Music Activities category.	242				
20.01 00 00 00	Academic Cocurricular Activities	243				
20.01 01 00 00	Art Club	243				
20.01 02 00 00	Biology Club	243				
20.01 03 00 00	Boys Nation	243				
20.01 04 00 00	Debate Club	243				
20.01 05 00 00	Distributive Education Clubs of America	243				
20.01 06 00 00	Dramatics Club	243				
20.01 07 00 00	Family Living Club	243				
20.01 08 00 00	4-H Club	243				
20.01 09 00 00	Foreign Language Club (may involve various languages—classical and/or modern)	243				
20.01 10 00 00	Future Business Leaders of America	243				
20.01 11 00 00	Future Farmers of America	243				
20.01 12 00 00	Future Homemakers of America	243				
20.01 13 00 00	Future Teachers of America (NEA)	243				
20.01 14 00 00	Girls Nation	243				
20.01 15 00 00	Industrial Arts Student Club	243				
20.01 16 00 00	International Relations Club	243				
20.01 17 00 00	Journalism Club (including school newspaper and annual)	243				
20.01 18 00 00	Junior Achievement, Incorporated	243				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
20	COCURRICULAR ACTIVITIES—Continued					
20.01 19 00 00	Literary Club	243				
20.01 20 00 00	Mathematics Club (may involve various aspects of mathematics)	243				
20.01 21 00 00	Music Club (may involve various aspects of music)	243				
20.01 22 00 00	National Honor Society (NEA)	243				
20.01 23 00 00	National Junior Honor Society (NEA)	243				
20.01 24 00 00	National Thespian Society	243				
20.01 25 00 00	Office Education Association	243				
20.01 26 00 00	Photography Club	243				
20.01 27 00 00	Quill and Scroll	243				
20.01 28 00 00	Science Club (may involve various aspects of natural sciences)	243				
20.01 29 00 00	Science Fair, International	243				
20.01 30 00 00	Social Studies Club	243				
20.01 31 00 00	Speech Club	244				
20.01 32 00 00	Student Nurses Association	244				
20.01 33 00 00	Vocational Industrial Clubs of America	244				
20.01 34 00 00	Voice of Democracy	244				
20.01 35 00 00	Young Farmer Association	244				
20.01 99 00 00	Other Academic Cocurricular Activities (Specify.)	244				
20.02 00 00 00	Athletic and Sport Cocurricular Activities	244				
20.02 01 00 00	Aquatics	244				
20.02 02 00 00	Archery	244				
20.02 03 00 00	Badminton	244				
20.02 04 00 00	Baseball	244				
20.02 05 00 00	Basketball	244				
20.02 06 00 00	Bowling	244				
20.02 07 00 00	Cheerleading	244				
20.02 08 00 00	Cross Country	244				
20.02 09 00 00	Field Hockey	244				
20.02 10 00 00	Football	244				
20.02 11 00 00	Girls' Athletic Association	244				
20.02 12 00 00	Golf	244				
20.02 13 00 00	Gymnastics	244				
20.02 14 00 00	Riflery	244				
20.02 15 00 00	Snowskiing	244				
20.02 16 00 00	Soccer	244				
20.02 17 00 00	Softball	244				
20.02 18 00 00	Tennis	244				
20.02 19 00 00	Track and Field	244				
20.02 20 00 00	Twirlers (Baton)	244				
20.02 21 00 00	Volleyball	244				
20.02 22 00 00	Wrestling	244				
20.02 99 00 00	Other Athletic and Sport Cocurricular Activities (Specify.)	244				
20.03 00 00 00	Music Cocurricular Activities	244				
20.03 01 00 00	Combo	244				
20.03 02 00 00	Concert Band	244				
20.03 03 00 00	Dance Band	244				
20.03 04 00 00	Drum and Bugle Corps	244				
20.03 05 00 00	Marching Band	244				
20.03 06 00 00	Pep Band	244				
20.03 07 00 00	Choir	245				
20.03 08 00 00	Chorus	245				
20.03 09 00 00	Instrumental Ensemble	245				
20.03 10 00 00	Vocal Ensemble	245				
20.03 11 00 00	Glee Club	245				
20.03 12 00 00	Music Production	245				
20.03 13 00 00	Orchestra	245				
20.03 99 00 00	Other Music Cocurricular Activities (Specify.)	245				
20.04 00 00 00	School and/or Public Service Cocurricular Activities	245				
20.04 01 00 00	Audiovisual Assistant	245				
20.04 02 00 00	Class Officer	245				
20.04 03 00 00	Film Projectionist	245				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
20 COCURRICULAR ACTIVITIES—Continued						
20.04 04 00 00	Laboratory Assistant	245				
20.04 05 00 00	Library Assistant	245				
20.04 06 00 00	National Junior Red Cross	245				
20.04 07 00 00	National Student Traffic Safety Program	245				
20.04 08 00 00	Office Assistant	245				
20.04 09 00 00	Poster and Display Club	245				
20.04 10 00 00	School Newspaper Photographer	245				
20.04 11 00 00	School Service Club (includes guides for visitors and ushers)	245				
20.04 12 00 00	Student Council (National Association of)	245				
20.04 13 00 00	Student Patrol	245				
20.04 14 00 00	Student Union and/or Student Activity Center	245				
20.04 99 00 00	Other School and/or Public Service Cocurricular Activities (Specify.)	246				
20.05 00 00 00	Social Cocurricular Activities	246				
20.05 01 00 00	Boy Scouts of America	246				
20.05 02 00 00	Camp Fire Girls	246				
20.05 03 00 00	Creative Dance	246				
20.05 04 00 00	Cub Scouts (Boy Scouts of America)	246				
20.05 05 00 00	Folk Music Club	246				
20.05 06 00 00	Girls' Recreation Association	246				
20.05 07 00 00	Girl Scouts of the U.S.A.	246				
20.05 08 00 00	Hi–Y	246				
20.05 09 00 00	Hobby Club	246				
20.05 10 00 00	Junior Hi–Y	246				
20.05 11 00 00	Junior Tri–Hi–Y	246				
20.05 12 00 00	Stamp Club	246				
20.05 13 00 00	Tri–Hi–Y	246				
20.05 14 00 00	Y.M.C.A	246				
20.05 15 00 00	Y–Teens	246				
20.05 16 00 00	Y.W.C.A	246				
20.05 99 00 00	Other Social Cocurricular Activities (Specify.)	246				
21.00 00 00 00	SAFETY AND DRIVER EDUCATION	246				
21.01 00 00 00	Driver Education	247				
21.01 01 00 00	Alcohol, Drugs, other Harmful Substances, and Driving	247				
21.01 02 00 00	Characteristics of Drivers	247				
21.01 03 00 00	Development of Judgment	247				
21.01 04 00 00	Driving Skills (Behind-the-wheel Driving)	247				
21.01 05 00 00	Simulation Driving Experience	247				
21.01 06 00 00	Engineering	247				
21.01 07 00 00	Laws and Ordinances of Enforcement	247				
21.01 08 00 00	Motor Vehicle, The	247				
21.01 09 00 00	Traffic Accidents	247				
21.01 10 00 00	Traffic Citizenship	247				
21.01 99 00 00	Other Driver Education (Specify.)	247				
21.02 00 00 00	Safety Education	247				
21.02 01 00 00	Civil Defense	247				
21.02 02 00 00	Explosives (Included as 08.02 01 00 00 *Explosives* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	247				
21.02 03 00 00	Law, Liability, and Responsibility	247				
21.02 04 00 00	Personal Responsibility in Unsupervised Activities (For definition see 08.02 05 00 00 *Personal Responsibility in Unsupervised Activities* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	248				
21.02 05 00 00	Safety in the Home (For definition see 08.02 06 00 00 *Safety in the Home* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	248				
21.02 06 00 00	School Safety (For definition see 08.02 08 00 00					

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
21	SAFETY AND DRIVER EDUCATION—Continued					
	School Safety under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	248				
21.02 07 00 00	Traffic Safety (Included as 08.02 09 00 00 *Traffic Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	248				
21.02 07 01 00	Bicycle, Motor Bike, Other (Included as 08.02 09 01 00 *Bicycle, Motor Bike, Other* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	248				
21.02 07 02 00	Passenger (Included as 08.02 09 02 00 *Passenger* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	248				
21.02 07 03 00	Pedestrian (Included as 08.02 09 03 00 *Pedestrian* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	248				
21.02 07 04 00	Student Patrol (Included as 08.02 09 04 00 *Student Patrol* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)	248				
21.02 07 99 00	Other Traffic Safety (Specify.)	248				
21.02 08 00 00	Vocational and Occupational Safety (For definition see 08.02 10 00 00 *Vocational and Occupational Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	248				
21.02 99 00 00	Other Safety Education (Specify.)	248				
22.00 00 00 00	JUNIOR ROTC	248				
22.01 00 00 00	Army Junior ROTC	248				
22.01 01 00 00	Introduction to ROTC/NDCC and Military Organization	249				
22.01 02 00 00	Leadership	249				
22.01 02 01 00	Courtesies, Customs, and Rules of Conduct	249				
22.01 02 02 00	Leadership, Drill, and Exercise of Command	249				
22.01 02 03 00	Psychology of Leadership	249				
22.01 02 04 00	Principles of Leadership	249				
22.01 02 99 00	Other Leadership (Specify.)	249				
22.01 03 00 00	Hygiene and First Aid	249				
22.01 04 00 00	Weapons	249				
22.01 04 01 00	Individual Weapons	249				
22.01 04 02 00	Crew-served Weapons	249				
22.01 04 99 00	Other Weapons (Specify.)	250				
22.01 05 00 00	Marksmanship	250				
22.01 06 00 00	American Military History	250				
22.01 07 00 00	Small Unit Tactics: Infantry	250				
22.01 07 01 00	Individual	250				
22.01 07 02 00	Squad	250				
22.01 07 03 00	Platoon	250				
22.01 07 04 00	Company	250				
22.01 07 05 00	Battalion	250				
22.01 07 99 00	Other Small Unit Tactics: Infantry (Specify.)	250				
22.01 08 00 00	Map and Terrain Analysis	250				
22.01 09 00 00	Military Teaching Methods	250				
22.01 10 00 00	New Developments	250				
22.01 11 00 00	Military Service: Opportunities, Obligations and Benefits	250				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
22	JUNIOR ROTC—Continued					
22.01 12 00 00	Counterinsurgency	250				
22.01 13 00 00	Branches of the Army	250				
22.01 14 00 00	Communications	250				
22.01 15 00 00	Methods of Instruction	250				
22.01 99 00 00	Other Army Junior ROTC (Specify.)	250				
22.02 00 00 00	Navy Junior ROTC	250				
22.02 01 00 00	Naval Science I	251				
22.02 01 01 00	Drills, Commands, and Ceremonies	251				
22.02 01 02 00	Orientation and Sea Power	251				
22.02 01 99 00	Other Naval Science I Topics (Specify.)	251				
22.02 02 00 00	Naval Science II	251				
22.02 02 01 00	Adventures in Science	251				
22.02 02 01 01	Meteorology (For definition see Earth-Space Sciences, 13.04 03 00 00 *Meteorology*, under NATURAL SCIENCES.)	251				
22.02 02 01 02	Oceanography (For definition see Earth-Space Sciences, 13.04 04 00 00 *Oceanography*, under NATURAL SCIENCES.)	251				
22.02 02 01 99	Other Adventures in Science Topics (Specify.)	251				
22.02 02 02 00	Drills, Commands, and Ceremonies (For definition see 22.02 01 01 00 *Drills, Commands, and Ceremonies* under Naval Science I.)	251				
22.02 02 03 00	First Aid (For definition see 08.01 06 00 00 *First Aid* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	251				
22.02 02 04 00	Navigation I	251				
22.02 02 05 00	Seamanship	251				
22.02 02 99 00	Other Naval Science II Topics (Specify.)	251				
22.02 03 00 00	Naval Science III	251				
22.02 03 01 00	Adventures in Science (For definition see 21.02 02 01 00 *Adventures in Science* under Naval Science II.)	251				
22.02 03 01 01	Astronomy (For definition see Earth-Space Sciences, 13.04 01 00 00 *Astronomy*, under NATURAL SCIENCES.)	251				
22.02 03 01 99	Other Adventures in Science Topics (Specify.)	251				
22.02 03 02 00	Drills, Commands, and Ceremonies (For definition see 22.02 01 01 00 *Drills, Commands, and Ceremonies* under Naval Science I.)	251				
22.02 03 03 00	Electronics	251				
22.02 03 03 01	Communications	251				
22.02 03 03 02	Radar	251				
22.02 03 03 03	Sonar	251				
22.02 03 03 99	Other Electronics (Specify.)	251				
22.02 03 04 00	Judo	252				
22.02 03 05 00	Leadership	252				
22.02 03 06 00	Navigation II	252				
22.02 03 07 00	Survival	252				
22.02 03 99 00	Other Naval Science III Topics (Specify.)	252				
22.02 99 00 00	Other Navy Junior ROTC (Specify.)	252				
22.03 00 00 00	Air Force Junior ROTC	252				
22.03 01 00 00	Introduction to Aerospace Education	252				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
22	JUNIOR ROTC—Continued					
22.03 01 01 00	The Coming of the Aerospace Age	252				
22.03 01 02 00	Aerospace and the American People	252				
22.03 01 03 00	Aircraft of Today	252				
22.03 01 04 00	Space and the Universe	252				
22.03 01 05 00	Spacecraft and Launch Vehicles	252				
22.03 01 06 00	Weather	252				
22.03 01 07 00	The Air Force Community	252				
22.03 01 08 00	Air Force Traditions, Customs, and Flight Drill	252				
22.03 01 99 00	Other Introduction to Aerospace Education (Specify.)	252				
22.03 02 00 00	Elements of Aerospace Education	252				
22.03 02 01 00	Theory of Aircraft Flight	252				
22.03 02 02 00	Propulsion Systems for Aircraft	253				
22.03 02 03 00	Air Navigation	253				
22.03 02 04 00	Aerospace Industry and Research	253				
22.03 02 05 00	Civilian Aviation and Facilities	253				
22.03 02 06 00	Military Aerospace	253				
22.03 02 07 00	Techniques of Instruction and Ceremonial Drill	253				
22.03 02 99 00	Other Elements of Aerospace Education (Specify.)	253				
22.03 03 00 00	Aerospaceage Leadership	253				
22.03 03 01 00	Space Exploration: Manned and Unmanned Flight	253				
22.03 03 02 00	Space Technology/Propulsion: Guidance and Control of Space Vehicles	253				
22.03 03 03 00	International Space Programs	253				
22.03 03 04 00	Human Factors of Aviation and Space	253				
22.03 03 05 00	The Defense of the United States	253				
22.03 03 06 00	Aerospace Opportunities for the Individual	254				
22.03 03 07 00	Aerospace Leadership Application	254				
22.03 03 99 00	Other Aerospaceage Leadership (Specify.)	254				
22.03 04 00 00	National Security	254				
22.03 04 01 00	Elements of National Security, Part I	254				
22.03 04 02 00	Elements of National Security, Part II	254				
22.03 04 03 00	The Military Organization in Action	254				
22.03 04 99 00	Other National Security (Specify.)	254				
22.03 99 00 00	Other Air Force Junior ROTC (Specify.)	254				
22.04 00 00 00	Marine Corps Junior ROTC	254				
22.04 01 00 00	Military Training I	254				
22.04 01 01 00	Introduction to Marine Corps Junior Reserve Officer Training Corps	254				
22.04 01 02 00	History and Traditions of the Marine Corps	254				
22.04 01 03 00	Military Organization	254				
22.04 01 04 00	Courtesies, Customs, and Rules of Conduct	254				
22.04 01 05 00	Hygiene	254				
22.04 01 06 00	First Aid (See also 08.01 06 00 00 *First Aid* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)	254				
22.04 01 07 00	Leadership, Drill, and Exercise of Command	255				
22.04 01 08 00	Weapons	255				
22.04 01 09 00	Marksmanship	255				
22.04 01 99 00	Other Military Training I (Specify.)	255				
22.04 02 00 00	Military Training II	255				
22.04 02 01 00	Military Organization	255				
22.04 02 02 00	Leadership, Drill, and Exercise of Command	255				
22.04 02 03 00	Weapons	255				
22.04 02 04 00	Marksmanship	255				
22.04 02 05 00	Small Unit Infantry Tactics	255				
22.04 02 06 00	Map Reading and Use of the Compass	255				

Classification of items of information		Definition page No.	Type of instructional program			
			Elementary	Secondary	Junior College	Adult education
22	JUNIOR ROTC—Continued					
22.04 02 07 00	Individual Training for Atomic Warfare	255				
22.04 02 99 00	Other Military Training II (Specify.)	255				
22.04 03 00 00	Military Training III	255				
22.04 03 01 00	History and Traditions of the Marine Corps	255				
22.04 03 02 00	Leadership, Drill, and Exercise of Command	256				
22.04 03 03 00	Weapons	256				
22.04 03 04 00	Marksmanship	256				
22.04 03 05 00	Maps and Aerial Photographs	256				
22.04 03 06 00	Small Unit Tactics: Infantry	256				
22.04 03 07 00	Military Teaching Methods	256				
22.04 03 08 00	New Developments	256				
22.04 03 09 00	Organization of the Marine Corps	256				
22.04 03 10 00	Military Service: Opportunities, Obligations, and Benefits	256				
22.04 03 99 00	Other Military Training III (Specify.)	256				
22.04 99 00 00	Other Marine Corps Junior ROTC (Specify.)	256				

6

Definitions of Items of Information About Subject-Matter Areas and Cocurricular Activities

This chapter contains the definitions of the classified items of information in chapter 5. The classifications and numbering of the items in this chapter are identical with those in chapter 5.

The items of information in each of the 20 subject-matter areas represent (1) selected aspects of subject matter as appropriate for elementary, secondary, junior college, and adult education, and (2) a selection of items of information which will serve to describe the subject matter in a majority of the instructional programs across the Nation. Of the 20 subject-matter areas seven are identified with vocational education. These are Agriculture, Distributive Education, Health Occupations Education, Home Economics, Office Occupations, Technical Education, and Trade and Industrial Occupations. Of the 22 areas one is devoted to General Elementary Education and General Secondary Education and one to Cocurricular Activities.

The items of information about subject matter in this chapter are only briefly described; however, there are many items of information concerned with the *organization* and *administration* of curriculum and instruction which can be related to these items to provide additional description of subject matter. These items are classified and described in this handbook in chapters 3 and 4, respectively.

AGRICULTURE

01.00 00 00 00

Agriculture is comprised of the group of related courses or units of subject matter which are organized for carrying on learning experiences concerned with preparation for or upgrading in occupations requiring knowledge and skills in agricultural subjects. The functions of agricultural production, agricultural supplies, agricultural mechanization, agricultural products (processing), ornamental horticulture, forestry, agricultural resources, and the services related thereto, are emphasized in the instruction designed to provide opportunities for pupils to prepare for or improve their competencies in agricultural occupations. An agricultural occupation may include one or any combination of these functions.

The Ad Hoc Committee for Agriculture applied the following rationale to the selection of the items for placement in the Agriculture area: (1) the items were determined by consensus of the committee to be appropriate to agriculture; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified under Agriculture were identifiable by titles which the *ad hoc* committee considered to be most commonly used in agriculture.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items included in the X 07 00. Series.—Evaluation and Curriculum Improvement on pages 71–78 and the items included in the X 32 00. Series.—Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Future Farmers of America (FFA) chapters and related leadership training and supervised occupational experience programs are significant integral activities which aid agricultural education in making contributions to the guidance and total general educational development of pupils. The Future Farmers of America and related leadership training permeate every aspect of the instructional program in agriculture. The foundation upon which the FFA is built includes leadership and character development, sportsmanship, cooperation, service, thrift, scholarship, improved agriculture, organized recreation, citizenship, and patriotism. (For a more detailed treatment of the aims and purposes of FFA

NOTE.—For the interpretation of the code numbering system see *Identification Numbers* in the introduction to chapter 5. For the key to the cross-referencing system see *Cross-References* in the introduction to chapter 5.

see *Official Manual of Future Farmers of America.*)[1] (See also Item 20.01 11 00 00 *Future Farmers of America*, page 243 in this handbook.)

Included in this subject-matter area are the items of information which identify various aspects of agriculture.

01.01 00 00 00	**AGRICULTURAL PRODUCTION** Subject matter and learning activities which are concerned with the principles and processes involved in the planning related to and the economic use of facilities, land, water, machinery, chemicals, finance, and labor in the production of plant and animal products. In practice, activities include classroom instruction and laboratory experiences, in and out of school, including farms, ranches, and other agriculturally related establishments. Aspects of agricultural production are organized under a variety of descriptive titles, such as Animal Science, Plant Science, Farm Mechanics, Farm Business Management, and Other Agricultural Production.
01.01 01 00 00	**Animal Science**—Planned learning experiences which are concerned with the study and the operations dealing with theories, principles, and practices involved in producing animals and animal products for economic and other uses. (Included as 16.02 01 00 00 *Animal Science* under TECHNICAL EDUCATION and as part of 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION)
01.01 01 01 00	LIVESTOCK AND POULTRY—Organized subject matter and experiences designed for the study of and application to various major livestock enterprises. Among the considerations emphasized in instruction are selection and breeding, nutrition, animal health, housing and feeding practices, and management and marketing. The following are frequently studied, but are not defined here because of their commonly understood descriptions.
01.01 01 01 01	*Dairy Cattle*
01.01 01 01 02	*Beef Cattle*
01.01 01 01 03	*Horses*
01.01 01 01 04	*Swine*
01.01 01 01 05	*Sheep*
01.01 01 01 06	*Poultry*
01.01 01 01 99	*Other Livestock and Poultry*—Include here other livestock and poultry emphasized in instruction which are not listed above, e.g., goats, buffalo, and laboratory animals. (Specify.)
01.01 01 02 00	NUTRITION—The study of the relationship of proteins, fats, carbohydrates, water, minerals, and vitamins in the production of meat, milk, eggs, and wool. (see also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)
01.01 01 03 00	GENETICS—The study of the principles of inheritance and their applications for the improvement of animals through breeding and selection. (See also Major Aspects of the Biological Sciences, 13.02 00 14 00 *Genetics*, under NATURAL SCIENCES.)
01.01 01 04 00	PHYSIOLOGY—A study of the body processes and functions related to animal production such as lactation, reproduction (including artificial insemination and heat detection), egg production, digestion, growth, wool production, and other body processes and functions. (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)
01.01 01 05 00	ANIMAL HEALTH—The study of environment, drugs, antibiotics, vaccinations, blood tests, and other management factors in the prevention and control of diseases.
01.01 01 06 00	PRODUCTION MANAGEMENT—A combination of subject matter and experience concerned with operating and managing a commercial unit involving a specific class of animals.
01.01 01 06 01	*Feeding Practices*—A study of the "least-cost" combinations of feed ingredients for achieving maximum performance.
01.01 01 06 02	*Housing Practices*—A study of the housing and other environmental needs of a specific kind of animal.
01.01 01 06 99	*Other Production Management*—Include here other subject matter and experiences emphasized in production management which are not listed above. (Specify.)
01.01 01 99 00	OTHER ANIMAL SCIENCE—Include here other organized subject matter and experiences emphasized in animal science which are not classifiable or listed above. (Specify.)
01.01 02 00 00	**Plant Science**—Planned learning experiences which are concerned with the study and operations dealing with principles and practices involved in the culture and production of agricultural plants, (Included as 16.02 04 00 00 *Plant Science* under TECHNICAL EDUCATION)
01.01 02 01 00	CROPS—Organized subject matter and experiences designed for the study of and application to various major crop enterprises. Among the considerations emphasized in instruction are genetics, nutrition, soils, plant pathology, entomology, and disease and pest control. The following crops are frequently studied.
01.01 02 01 01	*Cereal Grain Crops*—The study of principles and practices involved in the production of cereal grains (members of the grass family such as corn, wheat, rice, and oats).
01.01 02 01 02	*Fiber Crops*—The study of principles and practices involved in the production of fiber-producing plants such as cotton and flax.
01.01 02 01 03	*Forage Crops*—The study of the principles and practices involved in the production of forage for livestock, e.g., grasses and legumes.
01.01 02 01 04	*Oil Crops*—The study of principles and practices involved in the production of oilseed crops such as soybeans, peanuts, and sunflowers.
01.01 02 01 05	*Tree Fruit and Nut Crops*—The study of principles and practices involved in the production of citrus fruits, apples, peaches, pecans, walnuts, and other tree fruit and nut crops.

---

[1] Official Manual of Future Farmers of America, a bulletin prepared by the Future Farmers Supply Service, (Alexandria, Va.: 1968), p. 11.

01 AGRICULTURE—(Continued)

01.01 02 01 06	*Small Fruit Crops*—The study of principles and practices involved in the production of strawberries, raspberries, blueberries, grapes, and other small fruit crops.
01.01 02 01 07	*Vegetable Crops*—The study of principles and practices involved in the production of potatoes, tomatoes, beans, sweet corn, peas, and other vegetable crops.
01.01 02 01 08	*Ornamental Crops*—The study of the principles and practices involved in the production of shrubs, trees, flowers, turf, and other plants used for ornamental and esthetic purposes. (See also 01.05 00 00 00 *Ornamental Horticulture (Production, Processing, Marketing, and Services).*)
01.01 02 01 09	*Farm Forestry*—(For definition see 01.07 00 00 00 *Forestry (Production, Processing, Management, Marketing and Services).*)
01.01 02 01 99	*Other Crops*—Include here other crops emphasized in instruction which are not listed above. (Specify.)
01.01 02 02 00	SOILS—The study of the physical, chemical, biological, and fertility properties of soils in relation to their management for crop production and other agricultural operations.
01.01 02 03 00	NUTRITION—The study of the nutrient and soil fertility requirements of various agricultural plants. (See also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)
01.01 02 04 00	GENETICS—The study of the principles of inheritance and their applications for the improvement of plants through breeding and selection. (See also Major Aspects of the Biological Sciences, 13.02 00 14 00 *Genetics*, under NATURAL SCIENCES.)
01.01 02 05 00	PHYSIOLOGY—The study of life processes in plants and their implications in production principles and practices. (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)
01.01 02 06 00	PLANT PATHOLOGY—The study of the symptoms, causes, and control (chemical and nonchemical) of plant diseases.
01.01 02 07 00	ENTOMOLOGY—The study of beneficial and harmful insects and their near relatives such as ticks, snails, slugs, spiders, and mites and their impact on agricultural production and methods of control. (See also Major Aspects of the Biological Sciences, 13.02 00 12 00 *Entomology*, under NATURAL SCIENCES.)
01.01 02 08 00	PLANT DISEASE AND PEST CONTROL—The study of symptoms, causes, and control of plant injuries and diseases caused by pests such as insects, diseases, nematodes, snails, mites, and injurious birds, and the chemical, physical, biological, cultural, and genetic methods of control of the undesirable forms of plant and animal life.
01.01 02 08 01	*Insecticides*—The study of substances or mixtures of substances that may be used to destroy or otherwise control insects and their near relatives, such as ticks, snails, slugs, mites, and spiders.
01.01 02 08 02	*Fungicides, Bactericides, Viricides, and Nematocides*—The study of substances used to destroy or inhibit pathogens, particularly those causing plant diseases. Included for study are fungicides and nematocides which also act as bactericides and insecticides.
01.01 02 08 03	*Herbicides*—The study of compounds used to destroy or inhibit the growth of selected plants.
01.01 02 08 04	*Rodenticides*—The study of compounds used to destroy rodents—especially rats and mice—and similar small animals.
01.01 02 08 05	*Nonchemical Controls*—The study of other pest control (management of populations) such as biological, mechanical, and cultural methods.
01.01 02 08 06	*Plant Genetic Resistance*—The study and application of genetics and breeding of plants having characteristic resistance to attack, infection, or loss from disease and insect pests. (See also 01.01 02 04 00 *Genetics*, above.)
01.01 02 08 99	*Other Plant Disease and Pest Control*—Include here other subject matter and experiences emphasized in plant disease and pest control. (Specify.)
01.01 02 09 00	ENVIRONMENTAL BIOLOGY—The study of the interaction of plant life processes with factors of the environment, and their characteristics and implications for managing plant production.
01.01 02 99 00	OTHER PLANT SCIENCE—Include here organized subject matter and experiences emphasized in plant science which are not classifiable or listed above. (Specify.)
01.01 03 00 00	**Farm Mechanics**—(See the category 01.03 00 00 00 *Agricultural Mechanics.*)
01.01 04 00 00	**Farm Business Management**—Planned learning activities concerned with farm resource analysis, accounting, production, financing, resource acquisition, purchasing, farm inputs, performance records, contracts, marketing, and maintenance. The results of these learning activities are applied to formulating decisions involved in managing a farm or ranch operation.
01.01 04 01 00	FARM ACCOUNTS—Subject matter and experiences concerned with accounting as applied to the various enterprises in agricultural production. (*See also* the categories 03.01 00 00 00 *Accounting*, and 03.03 00 00 00 *Bookkeeping*, under BUSINESS.)
01.01 04 02 00	PERFORMANCE RECORDS—Planned study and experiences concerned with the use of records in determining the efficiency of a production operation, e.g., yields per acre, pounds of milk per cow, and labor efficiency.
01.01 04 03 00	BUDGETING AND ANALYSIS—Subject matter and learning experiences involving the use of quantitative input-output relationships, costs, and price expectations to secure optimum economic returns to the enterprises of the commercial agricultural unit or the farm as a whole.
01.01 04 04 00	MANPOWER UTILIZATION—The study of factors that contribute to efficient and economic use of labor resources and the implications of these factors for labor management decisions of the farm manager. Emphasis in instruction is on such considerations as the development of knowledge about and ability to work

01 AGRICULTURE—(Continued)

	with agricultural manpower; employee selection; employer-employee relations; wages and working conditions; legal requirements; and conditions affecting the employee, e.g., education, health, and language barriers.
01.01 04 05 00	Purchasing and Marketing—The study of (1) acquiring (purchasing) input units such as livestock, feed, seed, fertilizer, machinery, and equipment, and (2) marketing as applied to animal and plant products.
01.01 04 06 00	Financial and legal Management—The study of factors involved in the control and application of the financial and legal aspects of managing a commercial agricultural production business.
01.01 04 07 00	Farm Organizations—Subject matter concerned with a comprehensive study of current programs of the several national, regional, and local farmers' organizations—including their development and purposes.
01.01 04 08 00	Government Programs—The study of current government policies, regulations, and programs available to and having influence upon agricultural production and management, farm prices, and income of rural people.
01.01 04 99 00	Other Farm Business Management—Include here other organized subject matter and experiences emphasized in farm business management which are not listed above.
01.01 99 00 00	**Other Agricultural Production**—Include here other organized subject matter and experiences emphasized in agricultural production which are not listed above. (Specify.)
01.02 00 00 00	**AGRICULTURAL SUPPLIES/SERVICES** Subject matter and learning experiences concerned with preparing pupils for occupations involved in providing consumable supplies used in the production phase of agriculture—including processing, marketing, consulting, and other services. Various aspects of agricultural supplies are organized under descriptive titles such as those which follow.
01.02 01 00 00	**Agricultural Chemicals**—The study of a variety of chemicals, drugs, and related products which are associated with the production of animal and plant products. Usually included for study are various types of chemicals used to prevent, control, or cure animal and plant diseases and control pests.
01.02 02 00 00	**Feeds**—The study of the business of processing and distributing feeds and feedstuffs.
01.02 03 00 00	**Seeds**—The study of the business of producing, processing, and distributing seeds.
01.02 04 00 00	**Fertilizers (Plant Food)**—The study of the principles concerned with the analysis, sale, and application of chemical elements known to be necessary for plant growth. These elements are classified as follows: primary—N, P, K; secondary—Ca, Mg, S; and micronutrients—B, Cu, Fe, Mn, Mo, Zn, Ce.
01.02 99 00 00	**Other Agricultural Supplies/Services**—Include here other organized subject matter and experiences emphasized in agricultural supplies which are not listed above. (Specify.)
01.03 00 00 00	**AGRICULTURAL MECHANICS** A combination of subject matter and activities designed to develop abilities necessary for assisting with and/or performing the common and important operations or processes involved in the selection, operation, maintenance, and use of agricultural power, agricultural machinery and equipment, structures and utilities, soil and water management, and agricultural mechanics shop, including kindred sales and services.
01.03 01 00 00	**Agricultural Power and Machinery**—A combination of subject matter and experiences designed to develop in pupils the abilities to (1) recognize and identify the fundamental principles of selection, operation, service, maintenance, repair, and safety in agricultural power—engines, electricity, and hydraulics, and (2) plan, install, service, assemble, adjust, operate, and repair farm machinery. (See also 16.01 02 02 00 *Agricultural Machinery and Equipment* under TECHNICAL EDUCATION.)
01.03 02 00 00	**Agricultural Structures and Conveniences**—Learning activities designed to assist pupils in developing the ability to plan, select materials for, and construct and maintain agricultural structures and conveniences. (See also 16.01 02 03 00 *Agricultural Structures and Conveniences* under TECHNICAL EDUCATION.)
01.03 03 00 00	**Soil Management**—A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying and classifying soils; determining cropping systems and fertilizer; and conditioning, and cultural practices that will result in efficient agricultural production.
01.03 04 00 00	**Water Management**—A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying, planning, laying out; constructing, using, and maintaining irrigation, drainage, water conservation, runoff, and erosion control systems, and with maintaining proper soil-water-plant relationships.
01.03 05 00 00	**Agricultural Mechanics Skills**—Planned learning experiences designed to develop skills, abilities, and judgments necessary to select, use, and maintain hand and power tools, arc and acetylene welders, and to plan and establish home farm shops.
01.03 06 00 00	**Agricultural Construction and Maintenance**—A combination of subject matter and experiences designed to develop skills and abilities necessary in the planning, layout, fabrication, and maintenance of farm and other agricultural equipment, especially small custom-built devices.
01.03 07 00 00	**Agricultural Electrification**—A combination of subject matter and experiences designed to provide opportunities for pupils to gain knowledge and understanding concerning making effective use of electricity and electrical equipment on farms, ranches, and other agricultural establishments. Included for study are the principles of electricity, maintenance and operation of equipment, and safety factors related thereto. (See also 16.01 02 01 00 *Agricultural Electrification Technology* under TECHNICAL EDUCATION.)

01 AGRICULTURE—(Continued)

01.03 99 00 00	**Other Agricultural Mechanics**—Include here other organized subject matter and experiences emphasized in agricultural mechanics which are not listed above. (Specify.)
01.04 00 00 00	**AGRICULTURAL PRODUCTS** A combination of subject matter and learning experiences designed to teach basic principles and management decisions involved in the science and technology of farm products, including marketing, inspection, and processing. The groups of products include meat, fish, poultry, and eggs; dairy products; fruits and vegetables; cereal grains; oilseeds; cotton, tobacco, and wool; and others.
01.04 01 00 00	**Food Products**—A combination of subject matter and learning experiences concerned with the scientific principles and operations involved in the preparation of agricultural products for sale and consumption, including home and institutional preparation of food and its nutritive value. (Included as 16.02 03 00 00 *Food Processing Technology* under TECHNICAL EDUCATION)
01.04 01 01 00	MEAT, FISH, POULTRY, EGGS—A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with meats and meat products, fish, poultry, and eggs.
01.04 01 02 00	DAIRY PRODUCTS—A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with milk and products derived from milk, e.g., cream, ice cream, butter, and cheese. (Included as 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION)
01.04 01 03 00	FRUITS AND VEGETABLES—A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with fruit and vegetable products.
01.04 01 04 00	CEREAL GRAINS—A combination of subject matter and practical experiences which are concerned with the information, processes, science, and decisions associated with cereal grains and grain products, e.g., wheat and flour.
01.04 01 05 00	OILSEEDS—A combination of subject matter and practical experiences concerned with the information, processes, science and decisions associated with oilseeds and oilseed products, e.g., soybeans, cottonseed, sunflower, and the oils derived from these seeds and any other edible oilseeds.
01.04 01 99 00	OTHER FOOD PRODUCTS—Include here other subject matter and practical experiences emphasized in food products which are not listed above, e.g., mushrooms, nut products, beverages, sugar, honey, maple products, condiments, and derivatives from nonfood crops, e.g., cottonseed oil. (Specify.)
01.04 02 00 00	NONFOOD PRODUCTS—A combination of subject matter and experiences concerned with the information, scientific principles, processes, and management decisions related to processing and marketing functions associated with nonfood products such as cotton, tobacco, and wool, as well as the industrial nonfood uses of grains and oilseeds.
01.04 02 01 00	COTTON—Subject matter and learning activities concerned with assembling, ginning, baling, processing, and marketing the fibers and byproducts of cotton.
01.04 02 02 00	TOBACCO—Subject matter and learning experiences concerned with grading, storing, processing, and marketing tobacco.
01.04 02 03 00	WOOL—Subject matter and learning experiences concerned with assembling, sorting, grading, processing, and marketing wool.
01.04 02 99 00	OTHER NONFOOD PRODUCTS—Include here other subject matter and practical experiences emphasized in nonfood products which are not listed above, e.g., furs, hemp, and gum. (Specify.)
01.04 99 00 00	**Other Agricultural Products**—Include here other organized subject matter and practical experiences emphasized in agricultural products which are not classifiable or listed above. (Specify.)
01.05 00 00 00	**ORNAMENTAL HORTICULTURE (PRODUCTION, PROCESSING, MARKETING, AND SERVICES)** Organized subject matter and practical experiences concerned with the culture of plants used principally for ornamental or esthetic purposes. Instruction emphasizes knowledge and understanding important to establishing, maintaining, and managing ornamental horticulture enterprises. Subject matter and experiences are organized under descriptive titles such as Aboriculture, Floriculture, Greenhouse Operation and Management, Turf Management, and other ornamental horticulture.
01.05 01 00 00	**Arboriculture**—Organized subject matter and practical experiences concerned with the principles and practices involved in the culture and maintenance of woody plants used for decoration and shade purposes.
01.05 02 00 00	**Floriculture**—Organized subject matter and practical experiences concerned with the principles and practices involved in field or greenhouse production of flowers and the arrangement of such flowers for ornamental purposes. (See also 04.05 00 00 00 *Floristry* under DISTRIBUTIVE EDUCATION.)
01.05 03 00 00	**Greenhouse Operation and Management**—Organized subject matter and practical experiences concerned with the principles and practices involved in producing plants under glass and in other artificial environments, including greenhouse operation, maintenance, and management.
01.05 04 00 00	**Landscaping**—Organized subject matter and practical experiences concerned with the principles and practices involved in locating, planting, and maintaining turf, plants, shrubs, trees, or devices for the beautification of home grounds and other areas of human habitation and recreation.
01.05 05 00 00	**Nursery Operation and Management**—Organized subject matter and practical experiences concerned with the production of turf, plants, shrubs and/or trees for the purposes of transplanting or propagating them, including nursery operation, maintenance, and management.
01.05 06 00 00	**Turf Management**—Organized subject matter and practical experiences concerned with the principles and practices involved in

establishing, managing, and maintaining grassed areas for ornamental and/or recreational purposes.

01.05 99 00 00 **Other Ornamental Horticulture**—Include here other organized subject matter and experiences emphasized in ornamental horticulture which are not listed above. (Specify.)

01.06 00 00 00 **AGRICULTURAL RESOURCES (CONSERVATION, UTILIZATION, AND SERVICES)**

A combination of subject matter and planned learning experiences concerned with the principles and processes involved in the conservation and/or improvement of natural resources such as air, forests, soil, water, fish, plants, and wildlife for economic and recreation purposes. Instruction also emphasizes such factors as the establishment, management, and operation of forest lands used for recreational purposes.

01.06 01 00 00 **Forests**—A combination of subject matter and experiences concerned with forests as living communities of plants and animals in which trees are the dominant species. Emphasis is on the multiple use of forest lands and resources.

01.06 02 00 00 **Recreation**—The study of recreation as one of the multiple uses of land, including emphasis of the principles of conservation. Included in instruction are examples of recreation activities which can be established, maintained, and managed, such as fishing, picnicking, hunting, camping, and nature study.

01.06 03 00 00 **Soil**—A combination of subject matter and practical experiences designed to provide opportunities for gaining knowledge and understanding concerning the principles and practices involved in maintaining soil stability and productivity, including the prevention of erosion, pollution, water logging, exhaustion of plant nutrients, and the accumulation of toxic salts.

01.06 04 00 00 **Wildlife—including game farms and hunting areas**—A study of the principles and practices involved in the preservation and/or improvement of wildlife such as game, fowl, and fish.

01.06 05 00 00 **Water**—A combination of subject matter and practical experiences concerned with water conservation practices such as prevention of soil erosion, sedimentation, other pollution, seepage, and evaporation; flood control; aquatic weed control; and the development, conservation, and management of water supplies for agricultural, domestic, industrial, and recreational purposes.

01.06 06 00 00 **Air**—The study of air pollution, including the effects of agricultural activities on pollution, and the effects of pollution on plants and animals.

01.06 07 00 00 **Fish—including farms and hatcheries**—A combination of subject matter and activities concerned with the propagation, rearing, stocking, and management of fish in public and private waters.

01.06 08 00 00 **Range**—The study of theories, principles, and practices involved in the preservation and/or improvement of natural range lands.

01.06 99 00 00 **Other Agricultural Resources**—Include here other organized subject matter and experiences emphasized in agricultural resources which are not listed above, including emerging occupational areas in this category. (Specify.)

01.07 00 00 00 **FORESTRY PRODUCTION, PROCESSING, MANAGEMENT, MARKETING, AND SERVICES**

A combination of subject matter and experiences concerned with the multiple use of forest lands and resources, including their management and protection.

01.07 01 00 00 **Forests**—(For definition see 01.06 01 00 00 *Forests* under *Agricultural Resources.*)

01.07 02 00 00 **Forest Protection**—A combination of subject matter and activities designed to provide knowledge, understanding, and judgment concerning the behavior of enemies of the forest and their control.

01.07 03 00 00 **Logging—harvesting and transporting**—Study, including observation and practical experiences, concerned with the initial collective activities involved in harvesting trees as a crop and in terms of not interfering with other desirable uses of the forest.

01.07 04 00 00 **Wood Utilization**—Organized subject matter and practical activities concerned with the many wood products of the forest. Emphasis in instruction is on the study of production, selection, grading, and marketing of forest raw material (wood) for multiple uses in conversion to consumer goods, e.g., paper, plywood, wallboard, plastics, and preservative-treated wood products.

01.07 05 00 00 **Recreation**—(For definition see 01.06 02 00 00 *Recreation* under *Agricultural Resources.*)

01.07 06 00 00 **Special Products**—Organized subject matter concerned with the production and marketing of special products, e.g., maple syrup, nuts, Christmas trees, and other products. Consideration is given to the great variety of products utilized in their natural states and/or manufactured from such products. The following are representative of special products.

01.07 06 01 00 CHRISTMAS TREES

01.07 06 02 00 MAPLE SYRUP

01.07 06 03 00 NUTS

01.07 06 99 00 OTHER SPECIAL PRODUCTS—Include here other special products emphasized in instruction which are not listed above. (Specify.)

01.07 99 00 00 **Other Forestry**—Include here other organized subject matter and activities emphasized in forestry which ase not listed above. (Specify.)

01.99 00 00 00 **OTHER AGRICULTURE**

Include here other organized subject matter and experiences emphasized in agriculture which are not listed or classifiable in one of the above categories. (Specify.)

ART

02.00 00 00 00

Art is comprised of the organized body of subject matter or related courses involving primarily visual, tactile, and kinesthetic expression. Included in instruction are the two-dimensional forms such as drawing, painting, or printmaking; the three-dimensional forms such as sculpture or pottery; other spatial concepts such as architecture and design for the performing arts; and the history and theory of art. Emphasis is placed upon the esthetic and creative factors of visual forms.

The Ad Hoc Committee for Art applied the following rationale to the selection of substantive content for placement in the Art subject-matter area: (1) the content was determined by consensus of the committee to be appropriate to art in terms of origin and meaning; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under Art were identifiable by titles which the *ad hoc* committee considered to be most commonly used in current practice.

Opportunities are frequently provided outside of regular classtime for pupils to pursue the development of interests, skills, and knowledge in selected aspects of art as an extension of their classwork. These activities, when approved by appropriate school authorities and directed or supervised by qualified adults, are referred to as *cocurricular activities*. They may be designed for the participation of pupils as individuals or in groups. A variety of such activities is identified and classified categorically under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the art areas.

02.01 00 00 00 **ART HISTORY AND THEORY**

The study of the visual arts from a conceptual point of view including its history, its relation to social and psychological conditions, to philosophic positions, and to other humanistic disciplines. Art concepts are treated under a variety of descriptive titles such as Art History, Art Theory, Humanities, and other art history and theory.

02.01 01 00 00 **Art History**—The study of the history and evolution of art forms and symbols and their relationship to other historical data, usually presented in chronological or cultural order. Specific periods of art, including contemporary, may be isolated in specialized courses. The focus might be on sensitivity to the inherent esthetic merits of a work of art as well as its historical significance.

02.01 02 00 00 **Art Theory**—The study of those aspects of philosophy, psychology, sociology, and other disciplines which relate to art topics. Esthetics, criticism, creativity, perception, cultural anthropology, and other relevant social or behavioral studies may be included. This subject matter also applies to the professional education of art teachers and professional museum personnel.

02.01 03 00 00 **Humanities**—The study of selected aspects of art presented in relation to visual and performing arts, literature, and philosophy in their social and historical concepts. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances, these aspects of subject matter are fused or integrated with selected content from art forming the core. (See also 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.06 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

02.01 99 00 00 **Other Art History and Theory**—Include here other organized subject matter emphasized in art history and theory which is not listed above. (Specify.)

02.02 00 00 00 **ART STUDIO**

A space designed to provide learning situations involving participation by pupils in the visual arts, emphasizing their expressive and creative aspects and the development of necessary related skills and understanding. Esthetic merit, rather than technical virtuosity, receives primary emphasis. Opportunities for studio experiences are provided under descriptive titles such as Basic Design, Commercial Design, Environmental Design, Crafts, Drawing, Painting, Photography, Printmaking, Sculpture, and other art studio.

02.02 01 00 00 **Basic Design**—A study of the relationships of two- and three-dimensional visual forms, somewhat comparable to the study of the structure of verbal language. The elements and principles affecting visual expression are central. Design is treated under a variety of descriptive course titles.

02.02 01 01 00 TWO-DIMENSIONAL DESIGN—The study of the relationships of line, shape, color, movement, and other visual elements when applied to a plane.

02.02 01 02 00 THREE-DIMENSIONAL DESIGN—The study of the structural relationships of form, texture, space, movement, light modulation, and other visual elements as they apply to three-dimensional configurations.

02.02 02 00 00 **Commercial Design**—Studies directed toward specific applications of design principles. Commerical design is organized and treated under a variety of titles such as Advertising and Graphic Design, Design for the Performing Arts, Fashion Design, Technical and Medical Illustration, and other commercial design. (Included as 04.00 00 51 00 *Commercial Design* under DISTRIBUTIVE EDUCATION)

02.02 02 01 00 ADVERTISING AND GRAPHIC DESIGN—The development of skills necessary in the preparation of visual material suitable for quantity reproduction. Lettering, typography, layout, and illustration are included. Negotiation, bidding, and cost estimating may also be taught.

02.02 02 02 00 DESIGN FOR THE PERFORMING ARTS—The study of design and production of sets,

02 ART—(Continued)

costumes, props, and other accouterments of the performing arts. Work with theatrical productions is essential.

02.02 02 03 00 Fashion Design—The study and development of skills and processes involved in the design of apparel. Textile and clothing industries may be taught.

02.02 02 04 00 Technical and Medical Illustration—The development and use of skills and processes involved in creating illustrations relating to industrial, scientific, or medical subjects. Study in science, industrial technology, and/or associated medical areas is frequently included in the development of knowledge and skills necessitating advanced study.

02.02 02 99 00 Other Commercial Design—Include here other organized subject matter and experiences emphasized in commercial design which are not listed above. (Specify.)

02.02 03 00 00 **Environmental Design**—The development of environmental sensitivity and the application of principles of spatial and structural design to the problems of creating structural elements and to products that man creates to adapt, alter, and control his surroundings.

02.02 03 01 00 Architectural Design—The study of organization and enclosure of space for functional and esthetic purposes. The relationships of color, texture, volume, space, shape, and site are emphasized. Specialized sequences and related studies in engineering and technology are essential.

02.02 03 02 00 Industrial and Product Design—The study of, with central emphasis on, the integration of esthetic quality with industrial technology. The nature of materials and industrial processes, the functional characteristics of the product, consumer psychology, and rudimentary engineering skills are included in planning and design.

02.02 03 03 00 Interior Design—The planning of color, form, space, and textural elements for interiors, emphasizing esthetic consideration. The selection and relationship of furniture, furnishings, communications, traffic, and utilities are also included. The close relationship to the architecture and landscape is implicit.

02.02 03 04 00 Landscape Architecture—The application of design principles to the functional and esthetic problems of altering, adapting, and controlling the external environment. Supporting studies in related areas are necessary, e.g., horticulture, civil engineering, finance, sociology, and social psychology.

02.02 03 05 00 Urban Planning—Study involving the planning and design of cities and towns, or portions thereof, emphasizing the integration of functional and esthetic aspects of the urban environment.

02.02 03 99 00 Other Environmental Design—Include here other organized subject matter and experiences emphasized in environmental design which are not listed above. (Specify.)

02.02 04 00 00 **Crafts**—Activities for pupils which are planned to emphasize the conception and production of "objects designed for use," Design quality and esthetic and creative factors are emphasized. Consideration of function and technique, while important, is subordinated to these activities. Craft activities are designed under a variety of descriptive titles such as Metalwork and Jewelry, Pottery and Ceramics, Textiles, and other crafts.

02.02 04 01 00 Metalwork and Jewelry—Study and activities which involve the techniques of metalwork and jewelry such as brazing, soldering, forging, casting, finishing, and other techniques.

02.02 04 02 00 Pottery and Ceramics—Study and activities concerned with the forming, firing, glazing, and other finishing, processes of ceramic ware. Clay composition and glaze chemistry may be taught.

02.02 04 03 00 Textiles—Activities in which the central concern is weaving, printing, and creating new forms in fiber and other material. The utilization of the product is not normally an important element.

02.02 04 99 00 Other Crafts—Include here other crafts which are emphasized for study, e.g., wood, leather, enameled metal, glass, and other materials. (Specify.)

02.02 05 00 00 **Drawing**—The process of producing work in a variety of wet or dry media including, among others, pencil, pen or brush and ink, crayon, chalk, or mixed media, usually nonchromatic. Drawing experiences may emphasize a particular medium or specialized subject matter.

02.02 06 00 00 **Painting**—The process of producing work in a variety of media such as oils, water color, tempera, casein, synthetics, and mixed media. Painting experiences may emphasize a particular medium or specialized subject matter.

02.02 07 00 00 **Photography and Related Media**—The process of producing work in photographic and related media emphasizing, in addition to technical aspects, the artistic elements which distinguish this work from similar offerings in journalism, science, or vocational education. Specialized studies may be offered in still or motion pictures, television, and other electronic equipment.

02.02 08 00 00 **Printmaking**—The process of printmaking, including intaglio, relief, planographic, and stencil operations. Etching, engraving, lithography, wood and linoleum cuts, silk screen, calligraphy, and allied techniques are included in this category. These activities do not include industrial printing.

02.02 09 00 00 **Sculpture**—The conception and creation of expressive forms by means of modeling, forming, carving, and constructing. Media may include clay, wood, stone, metal, wax, plaster, synthetics, found objects, and others.

02.02 99 00 00 **Other Art Studio**—Include here other techniques or media emphasized in art studio which are not listed above. (Specify.)

02.99 00 00 00 **OTHER ART**

Include here other organized subject matter and experiences emphasized in art which are not listed or classifiable under one of the major categories listed above, including emerging art concepts. (Specify.)

BUSINESS
03.00 00 00 00

Business includes the body of related subject matter, or related courses, and planned learning

03 BUSINESS—(Continued)

experiences which are designed to develop in pupils the attitudes, knowledge, skills, and understanding concerned with business principles and practices having applications for personal use and/or activities in the business world. Business also includes a wide variety of aspects of general education,e.g., subject matter from other subject areas such as English (language arts), social sciences/social studies, and mathematics.

The *Ad hoc* Committee for Business applied the following criteria to the selection of substantive content for placement in the Business subject-matter area: (1) the content was determined by consensus of the committee to be unique to business historically and in origin; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under Business were identifiable by titles which were considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of business as an integral part of the instructional program. As an example, the Future Business Leaders of America provides additional opportunities to develop leadership, other qualities, and an understanding of the world of work in business. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities.* They may be designed for participation of pupils as individuals or in groups, and are an integral part of classwork. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Future Business Leaders of America is identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 10 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are the items of information which identify various subjects in business.

03.01 00 00 00 **ACCOUNTING**

Organized subject matter and learning activities which are designed to provide opportunities for pupils to develop knowledge, understanding, and skills concerned with the principles and theory of accounting, and accounting practices. Different aspects of accounting are organized for instruction under various descriptive titles, such as Accounting Principles, Accounting Systems, Advanced Accounting, Cost Accounting, Data Processing Accounting, Governmental and Institution Accounting, Income Tax Accounting, Intermediate Accounting, Payroll Accounting, Secretarial Accounting, and other accounting. (Included as 04.00 00 85 00 *Accounting* under DISTRIBUTIVE EDUCATION) (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 01 00 00 **Accounting Principles**—Subject matter and learning experiences which are designed to introduce pupils to the general principles of accounting. Usually included for study are theory and practice of accounting and their application to, for example, proprietorships, partnerships, and corporations; problems in recording transactions; payroll and tax transaction procedures; procedures in depreciation and accrual accounting; and preparation and analysis of financial statements. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

03.01 02 00 00 **Accounting Systems**—An organization of subject matter and learning experiences designed to prepare pupils to analyze accounting systems and procedures and to devise and recommend improvements for existing systems. Usually included is the study of automatic data processing and its application to the accounting system. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

03.01 03 00 00 **Advanced Accounting**—An organization of subject matter and learning activities concerned with the refinement and expansion of accounting theory and procedures with emphasis being placed on a variety of special problems dealing with such considerations as partnerships, proprietorships, and corporations, and installments, consignments, budgeting, depreciation and depletion, governmental accounting, consolidated statements, taxes, liquidation, receiverships, and actuarial science. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 04 00 00 **Auditing**—The study of the concepts, objectives, and ethics applicable to auditing (the examination of accounts), including audit plans, internal control, sampling, and specific auditing procedures concerned with such items as cash, investments, receivables, inventories, plant, equipment, expenses, and writing an audit report. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 05 00 00 **Cost Accounting**—The study of procedures and practices involved in accounting for materials, labor, overhead, and burden under job-order, including various systems of cost accounting, accounting related to sales, and accounting as a managerial tool of control. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.02 00 00 00 *Business Data Processing Systems Occupations*, and 14.08 00 00

03 BUSINESS—(Continued)

00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 06 00 00 **C.P.A. Review**—The study of accounting standards, concepts, and principles, and their applications in practice. Special attention is given to the AICPA examinations.

03.01 07 00 00 **Data Processing Accounting**—Subject matter and learning activities which involve the use of modern data processing procedures and equipment in financial activities, with special emphasis being placed on systems, including the use of punchcard equipment, common-language devices, accounting machines, and computers. In practice, special applications are made to inventory control, payroll procedures, customer accounts, billing procedures, and storage and retrieval of information. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

03.01 08 00 00 **Governmental and Institutional Accounting**—The study of accounting procedures and principles as applied to fund accounting for governmental units, accounting for nonprofit institutions, and budget control in these institutions. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations and* 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 09 00 00 **Intermediate Accounting**—Usually, an organization of subject matter and learning experiences which are designed to provide (1) a systematic review of fundamental accounting processes, and (2) applications of accounting principles to major accounting problems such as assets, liabilities, working capital, the balance sheet, the income statement, the analysis of statements, and stockholders' equity. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

03.01 10 00 00 **Managerial Accounting**—The study of accounting analysis information and techniques which are utilized by management in its decisionmaking responsibilities and activities. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.01 11 00 00 **Payroll Accounting**—A combination of subject matter and learning activities which apply to payroll accounting procedures and control, including the study of Federal and State laws and their interpretations and the preparation of reports required by governmental agencies. In practice, payroll accounting is frequently a part of bookkeeping or office practice courses, and includes recording wages, computing payrolls and payroll deductions, and recording payroll entries. (See also the category 14.01 00 00 00 *Accounting and computing Occupations* under OFFICE OCCUPATIONS.)

03.01 12 00 00 **Secretarial Accounting**—A study of accounting and bookkeeping fundamentals designed primarily for stenographers and secretaries. Included for study are various accounting/bookkeeping activities, i.e., single-and double-entry bookkeeping, payroll procedures, petty cash, records for merchandising, records for various professional services, income statements, taxes, and other financial reports. (See also 14.08 01 00 00 *Administrative Assistants* under OFFICE OCCUPATIONS.)

03.01 13 00 00 **Tax Accounting**—The study of accounting principles, procedures, and regulations applicable to the maintenance of records and the preparation and filing of income tax returns for individuals, partnerships, corporations, and other types of organizations. Sometimes State and local tax laws and procedures are included in addition to the study and interpretation of Federal income tax legislation. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

03.01 99 00 00 **Other Accounting**—Include here other organized subject matter and activities emphasized in accounting which are not classified above. (Specify.)

03.02 00 00 00 **ADVERTISING AND SALES PROMOTION**

(For definition see 04.00 00 44 00 *Advertising and Sales Promotion* under DISTRIBUTIVE EDUCATION.)

03.02 01 00 00 **Advertising Principles**—(For definition see 04.00 00 45 00 *Advertising Principles* under DISTRIBUTIVE EDUCATION.)

03.02 02 00 00 **Advertising Copywriting**—(For definition see 04.00 00 47 00 *Advertising Copywriting* under DISTRIBUTIVE EDUCATION.)

03.02 03 00 00 **Advertising Media and Campaigns**—(For definition see 04.00 00 46 00 *Advertising Campaigns* and 04.00 00 49 00 *Advertising Media* under DISTRIBUTIVE EDUCATION.)

03.02 04 00 00 **Direct-Mail Advertising**—(For definition see 04.00 00 52 00 *Direct-Mail Advertising* under DISTRIBUTIVE EDUCATION.)

03.02 99 00 00 **Other Advertising and Sales Promotion**—Include here other organized subject matter and activities emphasized in advertising and sales promotion which are not classified under DISTRIBUTIVE EDUCATION. (Specify.)

03.03 00 00 00 **BOOKKEEPING**

The study of the fundamental principles involved in the preparation and maintenance of financial records concerned with business management and operations. Emphasis is placed on various records such as budgets, payrolls, and financial statements. In practice, pupils usually are provided opportunities to gain limited experience in the use of selected office machines. Subject matter and activities in bookkeeping are treated under various descriptive titles such as Bookkeeping, First Course; Bookkeeping, Second Course; Bookkeeping, Third Course; Bookkeeping, Fourth Course; Machine Bookkeeping; Payroll Record Keeping; Record Keeping; and other bookkeeping.

03.03 01 00 00 **Bookkeeping, First Course**—A combination of subject matter and learning experiences concerned with the elementary principles of bookkeeping, including some theory of accounting. In practice, various bookkeeping situations are emphasized in instruction, e.g., single-and double-entry bookkeeping; methods and principles of recording business transactions; the preparation of various documents used in recording income, expenses, acquisition of assets, incurrance of liabilities, and changes in equity; and the preparation and some interpretation of financial statements. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

03.03 02 00 00 **Bookkeeping, Second Course**—Includes repeating the cycle of the first course, expanding the subject matter and enlarging the degree of difficulty. In addition, the pupils are introduced to the simplest forms of partnership and corporation accounting. Actual books, based on simulated companies, transactions, and situations, are used in the learning process. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

03.03 03 00 00 **Bookkeeping, Third Course**—Organized learning experiences which provide for more extensive treatment of the activities carried on in the first two courses or cycles. New elements on control accounting, subsidiary ledger work, and inventory accounting are usually introduced. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

03.03 04 00 00 **Bookkeeping, Fourth Course**—Usually, the terminal course in bookkeeping. In practice, provision is frequently made for repeating the cycles of the first three courses. More comprehensive treatment of specialized types of records, introduction to cost accounting systems, and often relationships simulated activities in data processing affecting bookkeeping are introduced. Increased emphasis is also placed on financial control through bookkeeping and report construction. (See also 14.01 02 00 00 *Bookkeeping* under OFFICE OCCUPATIONS.)

03.03 05 00 00 **Machine Bookkeeping**—An organization of subject matter and directed activities, often designed as a unit in a bookkeeping or an accounting course, to provide opportunities for pupils to gain experience in the use of bookkeeping machines, usually posting accounts receivable and other control account data. (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

03.03 06 00 00 **Payroll Record Keeping**—A combination of subject matter and practice activities which are concerned with (1) the study of Federal and State laws that affect payroll, (2) the study of basic payroll forms and records and their uses, (3) practice in calculating hours worked by employees, overtime, gross and net pay, and deductions, and (4) practice in preparing records and the required government reports from the records. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

03.03 07 00 00 **Record Keeping**—Subject matter and learning experiences that deal with financial records less technical than those provided in the first and second courses in bookkeeping and which are frequently considered to be on a clerical level. Emphasis is placed on simple, commonly used financial records which often are concerned with personal, family, club, and small business needs. Sometimes the subject matter and experiences serve as a background for enrollees in the first and second courses in bookkeeping as well as a substitute for bookkeeping for those not desiring or not qualified to take technical bookkeeping courses.

03.03 99 00 00 **Other Bookkeeping**—Include here other organized subject matter and activities emphasized in bookkeeping which are not listed above. (Specify.)

03.04 00 00 00 **BUDGET CONTROL**

The study of the budgetary process in business, e.g., planning for profitable operations, including systems of cost and profit analysis. The primary emphasis is on planning which will expedite the achievement of specific budget-control objectives (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations*, under OFFICE OCCUPATIONS.)

03.05 00 00 00 **BUSINESS ARITHMETIC OR MATHEMATICS**

(For definition see 11.05 01 00 00 *Business Arithmetic* under MATHEMATICS.)

03.06 00 00 00 **BUSINESS COMMUNICATIONS**

The study of oral and written English as they apply to business. The emphasis is on the type of correct and proper English needed by the secretary, stenographer, and clerk, and includes correctness and clarity in style and vocabulary in business correspondence, memorandums, formal and informal reports, and writing minutes. (See also 04.00 00 88 00 *Communications for Distribution* under DISTRIBUTIVE EDUCATION.) (See also the categories 14.04 00 00 00 *Information Communication Occupations*, 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations*, 14.08 00 00 00 *Supervisory and Administrative Management Occupations*, and 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)

03.06 01 00 00 **Business Correspondence**—Organized subject matter and activities which are designed to emphasize the writing of business letters, reports, and memorandums. In practice, subject matter and activities frequently include emphasis on both oral and written English which are used in business.

03.06 02 00 00 **Report Writing**—Learning experiences concerned with the process of investigating and presenting business problems and their solutions, usually including the study of methods of collecting, organizing, and interpreting data, with emphasis upon the elements involved in writing the final report. (Included as 04.00 00 97 00 *Report Writing* under DISTRIBUTIVE EDUCATION) (See also 14.04 02 00 00 *Correspondence Clerks* under OFFICE OCCUPATIONS.)

03.06 03 00 00 **Spelling and Vocabulary Building**—The study of words, their definitions, pronunciation, and applications. The activities normally include taking stock of words one knows, and learning to spell new words. The subject matter includes words for general vocabulary and words for the specialized business vocabulary.

03.06 99 00 00 **Other Business Communications**—Include here other organized subject matter and activities emphasized in business communications which are not listed above. (Specify.)

03.07 00 00 00 BUSINESS ETHICS

The study of morality and its background as a factor determining personal conduct and the consideration of personal and social problems from an ethical point of view. Usually included is the study of society and its influence on policies involved in management, and customer, employer, competitor, and governmental relationships. (This subject matter is also emphasized in various categories under 14.00 00 00 00 OFFICE OCCUPATIONS.)

03.08 00 00 00 BUSINESS FINANCE

An organization of subject matter designed to provide opportunities for pupils to gain knowledge and understanding of the principles of financial management and control as applied to business formation, expansion, reorganization, and liquidation. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.09 00 00 00 BUSINESS LAW

The study of the principles of law as they relate to business transactions and to the individual and his job responsibilities—the rights of individuals and businesses and other individuals and businesses with whom they deal. Usually, emphases are placed on considerations such as contracts, insurance, loans, sales, negotiable instruments, partnerships, corporations, principal and agent, and property. (Included as 04.10 03 00 00 *Business Law* under DISTRIBUTIVE EDUCATION) (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.10 00 00 00 BUSINESS MACHINES

A combination of subject matter and guided experiences concerned with developing in pupils the knowledge, understanding, and varying degrees of skills related to a variety of machines used in business offices. (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing*, and the category 14.03 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.) (See also specialized subject listings in the BUSINESS subject-matter area.)

03.10 01 00 00 Business Machines, First Course—Instruction and practice activities which are designed to provide pupils with an introduction to computing machines and opportunities to build acquaintanceship-level skills on adding machines (ten-key and full-key) and on calculating machines (key-driven, rotary, and printing). (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

03.10 02 00 00 Business Machines, Second Course—An extension of the learning and practice activities carried on in Business Machines, First Course with emphasis on developing job skills on computing machines—adding machines and calculators—and specific applications to business documents and procedures. (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

03.10 03 00 00 Calculating and Listing Machines—(For definition see 14.01 04 00 00 *Machine Operations: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

03.10 04 00 00 Duplicating Machines—Subject matter and practice activities, frequently organized as a unit in office practice, designed to provide skills development in the use of various types of reproducing machines, e.g., spirit, stencil, and photocopy duplicating machines. (See also 14.03 01 00 00 00 *Duplicating Machine Operators* under OFFICE OCCUPATIONS.)

03.10 99 00 00 Other Business Machines and Appliances—Include here other subject matter and activities emphasized in business machines and appliances which are not listed above. (Specify.)

03.11 00 00 00 BUSINESS PSYCHOLOGY

The study of superior-subordinate behavior interactions and the influence of group attitudes as they relate to the specific work environments. Subject matter usually includes interpersonal relationships between peers and superiors, personality acknowledgment, requirements for morale, personal efficiency, and leadership by example. (See also 04.10 12 00 00 *Human Relations* under DISTRIBUTIVE EDUCATION.) (See also the category 14.06 00 00 00 *Personnel, Training, and Related Occupations* under OFFICE OCCUPATIONS.)

03.12 00 00 00 BUSINESS STATISTICS

The study of the elementary aspects of statistics and their applications to business, e.g., tables, charts, ratios, percentages, averages, statistical data, realities, dispersion, skewness, time series, trends, indexes, forecasting, and correlations. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.02 00 00 00 *Business Data Processing Systems Occupations*, 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.13 00 00 00 OFFICE WORK EXPERIENCE

Planned educational activities designed to permit application, in a realistic situation, of background and skill knowledge previously learned through: cooperative programs with an approved teacher-coordinator in the business community; directed experience programs providing systematic supervision of the pupil learning situation in or out of school; or simulated programs providing realistic classroom work experience directed by a qualified teacher.

03.14 00 00 00 CLERICAL PRACTICE

Learning situations involving laboratory and discussion experiences which are designed to provide opportunities for pupils, not interested in or not pursuing secretarial or bookkeeping knowledge and skills, to develop knowledge and skills in clerical operations. Emphasis is on various activities, e.g., filing, record keeping, sometimes advanced typing, telephone and telegraph usage, mailroom activities, shipping procedures, personality development, machine operation, and job-application procedures. (See also the category 14.03 00 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.)

03.15 00 00 00 **CONSUMER EDUCATION**

(For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.16 00 00 00 **CREDIT AND COLLECTIONS**

(For definition see 04.00 00 28 00 *Credit and Collections* under DISTRIBUTIVE EDUCATION.)

03.17 00 00 00 **DATA PROCESSING AND COMPUTER OPERATION**

Learning activities concerned with surveying and studying the rapidly growing need for and uses of electronic data processing systems in the business office, and the implications for management, including the analysis and study of concepts of computer operations. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

03.17 01 00 00 **Introduction to Data Processing**—Instruction which is designed to provide opportunities for pupils to become acquainted with developments in data processing—concepts, procedures, understanding, and processing, electro-mechanical or electronic machines. Usually, various methods such as manual, machine, punched-card, and electronic are studied. Simple applications are made to payrolls, inventory, customer records, and billing. This is sometimes a separate course when equipment is available, or it is often a part of an office practice or bookkeeping course when equipment is not available. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

03.17 02 00 00 **Data Processing Systems**—The study of data systems and procedures such as the analysis, design, and control of management information and data communications systems. Other aspects of data processing systems frequently emphasized are: (1) the economics of manual, electromechanical, and electronic data processing; (2) the advantages and limitations of computers, communication, and information retrieval systems as tools for management control; (3) feasibility study techniques, evaluation equipment, and conversion techniques; and (4) installation, organization, and operation of a computer facility. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

03.17 03 00 00 **Computer - Oriented Mathematics (Data Processing Mathematics)**—Instruction which is concerned with a practical foundation in numerical concepts needed for understanding accounting and machine processes. Subject matter and learning experiences usually are designed to provide knowledge of rotation, number systems, number systems with an arbitrary base, basic algebra, linear equations, fixed floating point numbers, elements of Boolian algebra, methods of numerical computation, and use of the computer for numerical computation. (See also 11.08 00 00 00 *Computer Mathematics* under MATHEMATICS.)

03.17 04 00 00 **Computer Programming**—Learning activities designed to provide practice in flow charting and writing instructions in computer language for the direction of computer operation in the solution of a problem. Usually, subject matter includes program preparation steps, types of instruction, coding, flow charting and block diagramming, number systems, address systems, computer word format, housekeeping, running, and error detection. (See also 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (Included as 16.04 01 00 00 *Computer Programmer* under TECHNICAL EDUCATION)

03.17 05 00 00 **Computer Operation: Introduction**—The study of the principles of computer operation with emphasis on components and functions of a computer system, input-output media, central processing units, internal processing procedures, console and inquiring functions, and programming elements. Instruction is usually designed to enable pupils to gain "in-depth" knowledge of computer applications and characteristics. (See also 14.02 01 00 00 *Computer and Console Operators* under OFFICE OCCUPATIONS.)

03.17 06 00 00 **Processing Equipment Operation**—Learning experiences concerned with the operation of electrical/mechanical equipment, e.g., keypunch machines, accounting machines, collators, key sorters, and printer—either independently or in support of and/or auxiliary to the electronic data computer. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 01 00 PUNCHCARD DATA PROCESSING—An organization of subject matter and activities which is designed to provide opportunities for pupils to gain knowledge and experiences concerned with the use of punched card equipment, including basic machine operation, board wiring, and typical applications. (See also 14.02 02 01 00 *Keypunch and Coding Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 02 00 TABULATING EQUIPMENT OPERATION—Organized learning experiences designed to provide opportunities for pupils to gain knowledge and understanding about the punched-card system of data processing, including all peripheral equipment. Subject matter usually includes the punched card, machine functions, machine components, keypunch and verifier, interpreter, sorter, reproducer, collator, accounting machine-tabulator, calculator, basic housekeeping procedures, equipment used as computer support, and accounting applications. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 03 00 TABULATING MACHINE WIRING—Instruction which is concerned with the wiring of control panels that direct the operation of punched-card equipment. Subject matter usually includes machine logic, principles of control panel wiring, wiring fundamentals, and wiring practice. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 99 00 OTHER PROCESSING EQUIPMENT OPERATION—Include here other subject matter and experiences emphasized in processing equipment operation not listed above. (Specify.)

03.17 99 00 00 **Other Data Processing and Computer Operation**—Include here other subject matter and activities emphasized in data processing and computer operation which are not listed above, e.g., tape library systems, job scheduling, and job control. (See also 14.02 99 00 00 *Other Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.) (Specify.)

03.18 00 00 00 **ECONOMICS**

(For definition see 15.06 00 00 00 *Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 01 00 00 **Consumer Economics**—(For definition see 15.06 03 00 00 *Consumer Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 02 00 00 **Labor Economics**—(For definition see 15.06 08 00 00 *Resource Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 03 00 00 **Money and Banking**—(For definition see 15.06 05 00 00 *Money and Banking* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 04 00 00 **Principles of Economics**—(For definition see 15.06 07 00 00 *Principles of Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 99 00 00 **Other Economics**—Include here other subject matter emphasized in economics which is not listed above or classified under SOCIAL SCIENCES/SOCIAL STUDIES. (Specify.)

03.19 00 00 00 **ECONOMIC GEOGRAPHY**

(For definition see 15.07 02 00 00 *Human Geography* and 15.07 04 00 00 *Regional Geography* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.20 00 00 00 **EXPLORATORY BUSINESS**

An organization of subject matter and activities designed to assist the pupil in determining the extent of his interest in and aptitude for activities related to business employment. Emphasis is usually on limited skill objectives in shorthand, selling, bookkeeping and clerical duties.

03.21 00 00 00 **FILING**

Learning experiences which provide opportunities for pupils to study the principles of indexing and the various methods of filing used in business and other institutions, including actual practice in indexing and filing. (See also 14.03 02 00 00 *File Clerks* under OFFICE OCCUPATIONS.)

03.22 00 00 00 **FILING AND RECORD CONTROL**

Subject matter and learning experiences which are concerned with the extension and more advanced study of the elementary aspects of indexing and filing described in *Filing*. In practice, emphasis is frequently on a wide range of study and experiences such as filing systems and their management, storage, and retrieval of business records, rules of indexing, evaluation of various methods of filing, uses of filing equipment and supplies, automated filing procedures, the operation of an efficient records system, including forms design, and transfer and disposition of records. (See also 14.03 03 00 00 *General Office Clerks* under OFFICE OCCUPATIONS.)

03.23 00 00 00 **GENERAL BUSINESS OR INTRODUCTION TO BUSINESS**

Subject matter designed to make available to all pupils an introductory study of business, including (1) an understanding and appreciation of the nature, scope, and functions of the business-economic system in meeting consumer needs and wants; (2) an understanding of economic principles and desirable business practices which should be followed by consumers in the wise handling of their business affairs; and (3) an understanding and appreciation of career opportunities which are to be found in business occupations. This course may have other titles, such as Introduction to Business or Basic Business. The subject matter of this course has value for all pupils as members of the economic community. General Business, providing a higher level of subject matter, is frequently offered in postsecondary instructional programs in business.

03.24 00 00 00 **INSURANCE AND RISK**

(For definition see 04.13 00 00 00 *Insurance* and 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)

03.24 01 00 00 **Principles of Insurance**—(For definition see 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)

03.24 02 00 00 **Life Insurance**—(For definition see 04.00 00 72 00 *Life Insurance* under DISTRIBUTIVE EDUCATION.)

3.24 03 00 00 **Property and Casualty Insurance**—(For definition see 04.00 00 73 00 *Casualty Insurance* and 04.00 00 74 00 *Property Insurance* under DISTRIBUTIVE EDUCATION.)

03.24 99 00 00 **Other Insurance**—Include here other organized subject matter emphasized in insurance which is not listed above or classified under DISTRIBUTIVE EDUCATION.) (Specify.)

03.25 00 00 00 **INVESTMENTS**

An organization of subject matter concerned with the study of sources of capital, various types of securities, methods of financing, principles of investing, policies of investing, and kinds of financial and investment institutions.

03.26 00 00 00 **BUSINESS AND MANAGEMENT PRINCIPLES**

The study of planning, organizing, and controlling a business, including both the organizational and human aspects, often with emphasis on various theories of management, the purpose of which is to develop in pupils the knowledge and understanding necessary for managing people and functions and making decisions. (See also specific subject-matter categories in the subject-matter areas of BUSINESS and DISTRIBUTIVE EDUCATION.) (See also 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03 BUSINESS—(Continued)

03.26 01 00 00 **Business Principles**—An organization of subject matter designed to help pupils gain knowledge and understanding important to starting a small business or becoming a more productive employee. Frequently emphasized are considerations such as (1) organizing, financing, and managing a business, and (2) principles of purchasing, selling, merchandising, recordkeeping, granting credit, and collecting. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 02 00 00 **Business Organization and Management**—An organization of subject matter concerned with a wide range of considerations in the field of managing businesses, including the organizational aspects, managerial problems, financing, labor, government regulations, layout, control of materials, cost control, production and marketing, buying and pricing, and related problems. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 03 00 00 **Labor - Management Relations**—The study of the history and development of the labor movement, including an analysis and interpretation of Federal and State legislation, union contracts, labor negotiation, conciliation, arbitration, and grievance procedures. (See also the categories 14.06 00 00 00 *Personnel, Training, and Related Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 04 00 00 **Merchandising Management**—(For definition see 04.00 00 29 00 *Marketing Management, General* under DISTRIBUTIVE EDUCATION.)

03.26 05 00 00 **Office Management and Supervision**—An organization of subject matter designed for a study of scientific principles of office procedures records, and personnel. Emphasis are placed on a wide range of considerations including organization of the office; layout, selection and use of equipment; psychological problems; planning, selection, and training of personnel; policies and procedures; management of accounting activities; work simplification; office manuals and reports; and data processing functions. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 06 00 00 **Personnel Management**—(For definition see 04.00 00 31 00 *Personnel Management* under DISTRIBUTIVE EDUCATION.) (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 07 00 00 **Small Business Management**—(For definition see 04.00 00 33 00 *Small Business Management* under DISTRIBUTIVE EDUCATION.)

03.26 99 00 00 **Other Business and Management Principles**—Include here other organized subject matter emphasized in business and management principles which is not listed above or classified under DISTRIBUTIVE EDUCATION or OFFICE OCCUPATIONS. (Specify.)

03.27 00 00 00 **MARKETING**

(For definition see 04.00 00 38 00 *Marketing Research* under DISTRIBUTIVE EDUCATION.)

03.27 01 00 00 **Principles of Marketing**—(For definition see 04.00 00 10 00 *Principles of Marketing* under DISTRIBUTIVE EDUCATION.)

03.27 02 00 00 **Industrial Marketing**—(For definition see 04.00 00 12 00 *Industrial Marketing* under DISTRIBUTIVE EDUCATION.)

03.27 03 00 00 **International Marketing**—(For definition see 04.00 00 13 00 *International Marketing* under DISTRIBUTIVE EDUCATION.)

03.27 99 00 00 **Other Marketing**—Include here other organized subject matter emphasized in marketing which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)

03.28 00 00 00 **OFFICE PRACTICE**

Learning experiences which are usually designed to include (1) a combination of knowledge and skills gained in other business education courses, and (2) increased emphases on solving business problems and simulated experiences of working in the various departments of a business, e.g., purchases, sales, and bookkeeping. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.29 00 00 00 **PERSONAL DEVELOPMENT AND HUMAN RELATIONS**

Learning experiences designed for improving self-management and enhancing social and job performance. Emphasis is on improving study and work habits, qualities of leadership, grooming and personal appearance, and the analysis of personality deficiencies and ways of overcoming them.

03.30 00 00 00 **PERSONAL FINANCE**

Subject matter concerned with the study of everyday personal financial problems including such aspects as budgeting, borrowing, charge accounts, installment buying, insurance, savings, investments, pensions, social security, home ownership, banking, taxes, wills, and estates.

03.31 00 00 00 **REAL ESTATE**

(For definition see 04.17 00 00 00 *Real Estate* under DISTRIBUTIVE EDUCATION.)

03.31 01 00 00 **Principles of Real Estate**—(For definition see 04.00 00 75 00 *Real Estate Principles* under DISTRIBUTIVE EDUCATION.)

03.31 02 00 00 **Real Estate Appraisal**—(For definition see 04.00 00 79 00 *Real Estate Appraisal* under DISTRIBUTIVE EDUCATION.)

03.31 03 00 00 **Real Estate Finance**—(For definition see 04.00 00 80 00 *Real Estate Finance* under DISTRIBUTIVE EDUCATION.)

03.31 04 00 00 **Real Estate Law**—(For definition see 04.00 00 78 00 *Real Estate Law* under DISTRIBUTIVE EDUCATION.)

03.31 05 00 00 **Real Estate Management**—(For definition see 04.00 00 77 00 *Real Estate Management* under DISTRIBUTIVE EDUCATION.)

03.31 06 00 00	**Real Estate Sales**—(For definition see 04.00 00 81 00 *Real Estate Sales* under DISTRIBUTIVE EDUCATION.)
03.31 99 00 00	**Other Real Estate**—Include here other organized subject matter emphasized in real estate which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)
03.32 00 00 00	**RETAILING** (For definition see 04.00 00 15 00 *Retailing* under DISTRIBUTIVE EDUCATION.)
03.32 01 00 00	**Merchandise Information (Product Information)**—(For definition see 04.00 00 82 00 *Product Information* under DISTRIBUTIVE EDUCATION.)
03.32 02 00 00	**Retail Display**—(For definition see 04.00 00 54 00 *Retail Display* under DISTRIBUTIVE EDUCATION.)
03.32 03 00 00	**Retail Merchandising (Selling)**—(For definition see 04.00 00 23 00 *Retail Merchandising* under DISTRIBUTIVE EDUCATION.)
03.32 04 00 00	**Retail Salesmanship (Selling)**—(For definition see 04.00 00 64 00 *Retail Selling* under DISTRIBUTIVE EDUCATION.)
03.32 05 00 00	**Retail Store Management**—(For definition see 04.00 00 32 00 *Retail Store Management* under DISTRIBUTIVE EDUCATION.)
03.32 99 00 00	**Other Retailing**—Include here other organized subject matter emphasized in retailing which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)
03.33 00 00 00	**SALESMANSHIP PRINCIPLES** Planned learning experiences which include a combination of courses and practical experiences concerned with the why, what, how, and when of salesmanship—techniques which will provide information concerning why man is motivated to make purchases. Selling provides opportunity for people with appropriate traits, enthusiastic interests, and eagerness, to apply themselves. (See also 04.00 00 32 00 *Salesmanship* under DISTRIBUTIVE EDUCATION.)
03.33 99 00 00	**Other Salesmanship**—Include here other organized subject matter emphasized in salesmanship which is not classified in the major categories above or under DISTRIBUTIVE EDUCATION. (Specify.)
03.34 00 00 00	**SHORTHAND, STENOGRAPHIC, AND SECRETARIAL** The study of subject matter and the development of skills concerned with the substitution of symbols for letters, syllables, or words normally written in longhand as a means of achieving rapidity in writing. It also involves the related activities usually associated with transcribing the notes back into the common language through the use of typewriters, and includes the concomitant clerical activities. (See also 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 01 00 00	**Machine Shorthand**—Learning activities which are designed to provide opportunities for pupils to develop skills in recording dictation through the use of a machine, as contrasted with recording dictation with a pen or pencil. Frequently, high-speed recording is emphasized. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34.02 00 00	**Personal Use Shorthand**—Learning activities which are designed to provide opportunities for pupils to study a highly simplified alphabetic or symbol system of shorthand for personal use and to develop skill, through practice, in using it. In addition, instruction usually includes emphasis on taking notes, e.g., when working with printed materials, or listening to lectures, or when participating in discussions or meetings.
03.34 03 00 00	**Shorthand Theory, First Course**—Study and practice activities concerned with the basic theory of shorthand, including the shorthand alphabet, brief forms, phrasing principles and abbreviating principles, and the development of fluency in writing shorthand outlines. Generally, skills-development objectives include a dictation speed of 60–80 words per minute, and pretranscription techniques such as punctuation, spelling, and word usage are emphasized. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations*, under OFFICE OCCUPATIONS.)
03.34 04 00 00	**Shorthand Theory, Second Course**—Study and practice activities concerned with the refinement of basic shorthand principles and the extension of the shorthand vocabulary. The course is usually offered during the second half of the first year and provides emphasis on (1) building skill in taking dictation with a speed objective of 80–100 words per minute writing on new and practiced materials, and (2) the introduction of transcription on the typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 05 00 00	**Shorthand Dictation**—Study and practice activities—sometimes called Advanced Shorthand—which usually follow the elementary principles course but which may be introduced in Shorthand, First Course. The purpose of the course is to develop shorthand vocabulary; develop speed, accuracy, and shortcuts in taking dictation; and to develop sustained dictation with ordinary corrections and interruptions simulating office conditions. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 06 00 00	**Shorthand Speed Building**—Study and practice activities designed to develop (1) a high level of dictation skill—up to 140 words per minute, and (2) an expert level of transcription skill—up to 50 words per minute. Special dictation involving technical vocabularies such as those of medicine, law, engineering, and science is sometimes included in the course. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 07 00 00	**Shorthand Transcription**—Learning activities which provide for combining the skills of taking dictation on new material and transcribing it rapidly and accurately at the typewriter in mailable form. Considerations are given to special transcription

03 BUSINESS—(Continued)

	problems such as language structure and style, letter form, transcription shortcuts, vocabulary, punctuation, and general duties of office practice. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 08 00 00	**Machine Transcription**—Study and practice activities concerned with transcribing letters, reports, or other recorded data, using a transcribing (voice reproducing) machine and a typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 09 00 00	**Secretarial Practice**—Learning activities which include a combination of subject matter and skills development activities designed primarily for pupils who are interested in stenographic or secretarial work. Emphasis is on a variety of knowledge and skills, e.g., refining and improving dictation and transcription skills in an office setting, uses of business machines, personal etiquette and grooming, writing letters and reports for the executive, planning travel itineraries, filing and records management, advanced typewriting, and office hostessing. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 10 00 00	**Specialized Shorthand Terminology and Transcription (legal, medical, scientific/technical, other)**—A course designed to acquaint the pupil with the specialized terminology (legal, medical, scientific/technical, or other) and special shorthand forms of the selected field through the use of shorthand dictation exercises. The presentation includes transcription practice activities combining the specialized shorthand outlines, spelling, pronunciation, and definitions of the most-used specialized terms, with practical application at the typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 10 01 00	Legal
03.34 10 02 00	Medical
03.34 10 03 00	Scientific/Technical
03.34 10 99 00	Other Specialized Shorthand Terminology and Transcription (legal, medical, scientific/technical, other)—Include here other organized subject matter and activities emphasized in specialized shorthand terminology and transcription which are not classified above. (Specify.)
03.34 11 00 00	**Specialized Secretarial Practice (legal, medical, scientific/technical)**—A combination of subject matter and skills-development activities in the specialized fields of secretarial practice. Emphasis is on the secretarial duties and procedures peculiar to the field, and on refining and improving dictation and transcription skills in the setting of the legal office, the medical office or hospital, or the scientific or technical office or laboratory. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)
03.34 11 01 00	Legal
03.34 11 02 00	Medical
03.34 11 03 00	Scientific/Technical
03.34 11 99 00	Other Specialized Secretarial Practice (legal, medical, scientific/technical)—Include here other organized subject matter and activities emphasized in specialized secretarial practice which are not listed above. (Specify.)
03.34 99 00 00	**Other Shorthand, Stenographic, and Secretarial**—Include here other organized subject matter and activities emphasized in shorthand, stenographic, and secretarial which are not listed or classifiable in the above categories. (Specify.)
03.35 00 00 00	**TYPEWRITING** The subject matter and learning activities concerned with (1) typewriters and their manipulative parts, and (2) the development of skills in operating typewriters. (See also the category 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)
03.35 01 00 00	**Personal Typewriting**—A combination of subject matter and practice experiences to provide opportunities for pupils to develop knowledge about and skills in typewriting, primarily for personal use. Emphasis is on the attainment of limited skills in typewriting using straight copy, and on composition of original material at the typewriter such as personal correspondence, themes, outlines, and reports.
03.35 02 00 00	**Production Typewriting**—Planned learning experiences which are concerned with the improvement of basic typewriting techniques and the application of skills to the development of a high degree of speed and accuracy in producing typed materials on an office production basis including letters, envelopes, cards, labels, manuscripts, and other simulated office jobs. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)
03.35 03 00 00	**Typewriting, First Course**—Subject matter and practice experiences which are designed to assist the pupil in developing the touch system in typewriting, mastery of the keyboard, and reasonable proficiency in typewriting from straight copy. Emphasis is also on the correct operation of the manipulative parts of the typewriter, techniques in making corrections, how to prepare simple tabular matter, following instructions and solving problems on the typewriter, and skill in using grammar, punctuation, and spelling. In practice, attention is given to such aspects of typing as manuscripts, business letters, tables, and documents. Usually, the speed goal ranges from 35–50 words per minute. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)
03.35 04 00 00	**Typewriting, Second Course**—The learning experiences in this course are concerned with the further development of the skills emphasized in Typewriting, First Course, with concentration being on speed and accuracy and production typewriting on a sustained basis. Some attention is given to composition at the machine. In practice, the speed goal ranges from 60–75 words per minute. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)
03.35 99 00 00	**Other Typewriting**—Include here other subject matter and experiences emphasized in typewriting which are not listed above. (Specify.)

03 BUSINESS—(Continued)

03.99 00 00 00 OTHER BUSINESS

Include here other organized subject matter and activities emphasized in business which are not listed or classifiable in one of the above categories. (Specify.)

DISTRIBUTIVE EDUCATION
04.00 00 00 00

Distributive education includes various combinations of subject matter and learning experiences related to the performance of activities that direct the flow of goods and services, including their appropriate utilization, from the producer to the consumer or user. These activities include selling, and such sales-supporting functions as buying, transporting, storing, promoting, financing, marketing research and management.

Distributive education is comprised of programs of occupational instruction in the field of *distribution and marketing.* These programs are designed to prepare individuals to enter, or progress or improve competencies in, distributive occupations. Emphasis is on the development of attitudes, skills and understanding related to marketing, merchandising and management. Instruction is offered at the secondary, postsecondary, and adult education levels and is structured to meet the requirements for gainful employment and entrepreneurship at specified occupational levels. Distributive occupations are found in such areas of economic activity as retail and wholesale trade, finance, insurance, real estate, services and service trades, manufacturing, transportation, utilities, and communications.

The Ad Hoc Committee for Distributive Education applied the following rationale to the selection of the items for placement in the Distributive Education area: (1) the items were determined to be appropriate to distributive education in terms of recent vocational education legislation; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified under Distributive Education were identifiable by titles which the *ad hoc* committee considered to be most appropriate to distributive education.

Opportunities to develop leadership, social and civic awareness, and increased understanding of the world of work in distribution and marketing are provided through the Distributive Education Clubs of America, the youth organization for distributive education pupils. As an integral part of the instructional program, pupils engage in activities that extend their interests, skills and knowledges in selected aspects of distribution and marketing. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities.* A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242. The Distributive Education Clubs of America may be identified for reporting purposes under Cocurricular Activities as Item 20.01 05 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78 and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are instructional programs in distributive education, classified and identified as Items 04.01 00 00 00 through 04.99 00 00 00. Each of the instructional programs represents various combinations of subject matter. Instructional content may be identified as specific subject-matter or course titles; or, selected aspects of subject matter may be grouped (integrated or correlated). As an example of integrated or correlated subject matter see 04.00 00 01 00 *Distribution I.*

In any instructional program the subject matter emphasized may comprise any combination of the items listed (04.00 00 01 00 through 04.00 00 99 00) following 04.99 00 00 00. An illustration might be: instructional program, 04.02 00 00 00 *Apparel and Accessories*; examples of subject matter might be: 04.00 00 18 00 *Buying,* 04.00 00 23 00 *Retail Merchandising,* and 04.00 00 36 00 *Advertising Principles.*

04.01 00 00 00 ADVERTISING SERVICES

Organized subject matter and learning experiences related to planning, development, placement, and evaluation tasks performed by distributive employees and management personnel in demand creation, and sales promotion activities utilizing displays, merchandising aids, and mass media in such enterprises as advertising agencies, display houses, retail and wholesale establishments, and production industries.

04.02 00 00 00 APPAREL AND ACCESSORIES

Organized subject matter and learning experiences related to the variety of sales, fashion coordination, and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments primarily engaged in selling clothing of all kinds, including related articles for personal wear and adornment.

04.03 00 00 00 AUTOMOTIVE

Organized subject matter and learning experiences related to the variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail, wholesale, and service establishments engaged in selling, renting, storing or caring for cars and trucks, and in selling automotive parts, accessories, and equipment.

04.04 00 00 00 FINANCE AND CREDIT

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in institutions engaged in deposit banking and related services, extending credit in the form of loans, services allied with the exchange of securities and commodities, or consumer credit and collections.

04 DISTRIBUTIVE EDUCATION—Continued

04.05 00 00 00 FLORISTRY

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments, engaged in selling floral arrangements, cut flowers, growing plants, artificial plants, and related items for ornamental use. (See also 01.05 02 00 00 *Floriculture* under AGRICULTURE.)

04.06 00 00 00 FOOD DISTRIBUTION

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel in establishments primarily engaged in selling food for home preparation and consumption, or selling a general or commodity line of food products at wholesale.

04.07 00 00 00 FOOD SERVICES

Organized subject matter and learning experiences related to the sales and sales-supporting tasks performed by distributive employees and management personnel in establishments serving prepared foods and drinks for consumption on their own premises or at a place designated by the customer. (See also 09.02 03 00 00 *Food Management, Production, and Services*, under HOME ECONOMICS, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

04.08 00 00 00 GENERAL MERCHANDISE

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel engaged primarily in selling various types of merchandise at retail in department stores, junior department stores, variety stores, general merchandise stores, discount stores, and catalog houses.

04.09 00 00 00 HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT

Organized subject matter and learning experiences related to various sales and sales-supporting tasks performed by distributive employees and management personnel in establishments engaged primarily in selling one or more of the following product lines at retail, at wholesale, or to contractors: hardware, paint, wallpaper, lumber, building materials, supplies and equipment for home construction, or farm and garden supplies and equipment.

04.10 00 00 00 HOME FURNISHINGS

Organized subject matter and learning experiences related to various sales and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments engaged primarily in selling home furnishings such as furniture, household appliances, floor coverings, draperies, and specialized lines of home items. (See also 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)

04.11 00 00 00 HOTEL AND LODGING

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in establishments which provide lodging, lodging and meals, convention facilities, and other services on a year-round or seasonal basis to the general public or to an organization's membership.

04.12 00 00 00 INDUSTRIAL MARKETING

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel in establishing market potentials and selling goods and services to business and institutional buyers for use in their operations.

04.13 00 00 00 INSURANCE

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel for insurance carriers of all types, or by agents representing carriers and brokers dealing in the sale or placement of insurance contracts with carriers. (Comprises portion of definition of 03.24 00 00 00 *Insurance and Risk* under BUSINESS)

04.14 00 00 00 INTERNATIONAL TRADE

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in a variety of business establishments concerned with export sales, trade controls, foreign operations, attitudes, monetary problems, and other elements in international marketing.

04.15 00 00 00 PERSONAL SERVICES

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel in establishments primarily engaged in providing services. Generally, these services are concerned with personal improvement and the care of a person or his apparel. Included in this category are laundries and drycleaning establishments, shoe repair shops, funeral homes, photographic studios, and dance or art studios.

04.16 00 00 00 PETROLEUM

Organized subject matter and learning experiences related to the variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail or wholesale establishments engaged in the distribution of petroleum products.

04.17 00 00 00 REAL ESTATE

Organized subject matter and learning experiences related to tasks performed by persons who act for themselves or as agents for others in real estate brokerages or other firms engaged in buying, selling, appraising, renting, managing, and leasing of real property. (Included as 03.31 00 00 00 *Real Estate* under BUSINESS)

04.18 00 00 00 RECREATION AND TOURISM

Organized subject matter and learning experiences related to the variety of sales, counseling, and sales-supporting tasks performed by distributive employees and management personnel in establishments primarily engaged in providing amusement, recreation, entertainment, recreational supplies and equipment, or travel services. This instructional program also is designed for employees and management personnel engaged in other travel-serving businesses who assume responsibilities for stimulating the local economy through tourism.

04 DISTRIBUTIVE EDUCATION—Continued

04.19 00 00 00 TRANSPORTATION

Organized subject matter and learning experiences related to the physical movement of people, personal effects and products, and the sales, storing, and sales-supporting tasks performed by distributive employees and management personnel in enterprises engaged in passenger and freight transportation, public warehousing, and services incidental to transportation.

04.20 00 00 00 OTHER RETAIL TRADE

Include here other organized instructional programs and learning experiences emphasized in sales and sales-supporting tasks performed by distributive employees and management personnel in establishments engaged in selling merchandise purchased for resale to customers for personal, household, business or farm use, which are not listed above. (Specify.)

04.31 00 00 00 OTHER WHOLESALE TRADE

Include here other instructional programs and learning experiences, emphasized in sales and sales-supporting tasks performed by distributive employees and management personnel in places of business engaged primarily in selling goods to retailers, industrial, commercial, institutional and professional users, or bringing buyer and seller together, which are not listed above. (Specify.)

04.99 00 00 00 OTHER INSTRUCTIONAL PROGRAMS

Include here other organized instructional programs and learning experiences, emphasized in marketing functions performed by employees, managers and/or proprietors in establishments engaged in selling products or providing services to individuals and business establishments, including selected service trades, which are not classifiable as either retail *or* wholesale *in nature and function.* (Specify.)

04.00 00 01 00 DISTRIBUTION I—Organized learning experiences which are concerned with the competencies needed by those in basic entry jobs in distribution. The subject matter usually includes a survey of the marketing functions operating in a business enterprise, basic information and skills related to a product line or type of distributive service, and stresses the application of tool subjects, personal employability, and economic understandings. (*Distribution I* (*Cooperative* or *Distribution I* (*Project*) may be scheduled as an extension of *Distribution I.*)

04.00 00 02 00 DISTRIBUTION I (COOPERATIVE)—The extension of classroom instruction into regularly scheduled paid employment in distributive occupations appropriate to each pupil's vocational objective. Usually, the school refers pupils to training stations for an average of 15 hours per week throughout the year, arranges for on-the-job training and supervision, and grants credit for successful application of classroom instruction in the training situation.

04.00 00 03 00 DISTRIBUTION I (PROJECT)—The extension of classroom instruction into regularly scheduled laboratory training in which each pupil practices in and with conditions of employment appropriate to his vocational objective. Usually, the instructor assigns individualized projects through which desired occupational competencies may be achieved, coordinates participation activities with requirements of representative businesses, arranges for some on-the-job training, and approves credit for successful performance in the school and business laboratory environments.

04.00 00 04 00 DISTRIBUTION II—Organized learning experiences which precede Distribution III and which are concerned with the competencies needed by those in career development jobs in distribution. The subject matter usually stresses the marketing functions operating in a business enterprise, knowledge and techniques related to product lines, and includes human relations, judgment skills, problems in the tool subjects, and the role of distribution in the economy. (*Distribution II* (*Cooperative*) or *Distribution II II* (*Project*) frequently is scheduled as an extension of *Distribution II.*)

04.00 00 05 00 DISTRIBUTION II (COOPERATIVE)—Oriented to Distribution II. (For definition see 04.00 00 02 00 *Distribution I* (*Cooperative*).

04.00 00 06 00 DISTRIBUTION II (PROJECT)—Oriented to Distribution II. (For definition see 04.00 00 03 00 *Distribution I* (*Project*).)

04.00 00 07 00 DISTRIBUTION III—Organized learning experiences which typically follow Distribution II and provide for more extensive treatment of the activities carried on in Distribution II. Usually, the subject matter is approached from the point of view of the employee in relation to management activities and merchandising problems. Continued emphasis is given to the effective use of tool skills and the social and economic responsibilities of those engaged in distribution. (*Distribution III* (*Cooperative*) or *Distribution III* (*Project*) frequently is scheduled as an extension of *Distribution III.*)

04.00 00 08 00 DISTRIBUTION III (COOPERATIVE)—Oriented to Distribution III. (For definition see 04.00 00 02 00 *Distribution I* (*Cooperative*).

04.00 00 09 00 DISTRIBUTION III (PROJECT)—Oriented to Distribution III. (For definition see 04.00 00 03 00 *Distribution I* (*Project.*).)

04.00 00 10 00 PRINCIPLES OF MARKETING—Planned learning experiences which are concerned with the problems met in the process of moving goods from the producer to the consumer. The subject matter usually is approached from the viewpoint of employees and managers whose jobs require understandings and skills in the distribution of products and services. (Included as 03.27 01 00 00 *Principles of Marketing* under BUSINESS)

04.00 00 11 00 AGRICULTURAL MARKETING—Planned learning experiences which emphasize the principles and methods of marketing farm products. Usually, application is made to systems and agencies operating at both country and central markets, product grades, public regulations, pricing, and market analysis.

04.00 00 12 00 INDUSTRIAL MARKETING—The study and analysis of the marketing structure for industrial products. Emphasis frequently

	is on product policies and lines, distribution channels, sales programs, and warehousing problems. (Included as 03.27 02 00 00 *Industrial Marketing* under BUSINESS)
04.00 00 13 00	International Marketing—The study of the principles and practices of international trade. Learning experiences usually emphasize import-export procedures, distribution and financing practices in foreign markets, and need and opportunities in international trade. (Included as 03.27 03 00 00 *International Marketing under* BUSINESS)
04.00 00 14 00	Marketing Trends—The study and analysis of trade and business literature and research findings about marketing procedures and management. Application usually is made to all types of marketing situations by means of case analysis, special studies, the preparation of reports, field observations, and product investigations.
04.00 00 15 00	Retailing—Organized learning activities which emphasize the opportunities in and the development and present status of the retailing structure. Usually an analysis is made of the major store functions, procedures followed in retailing, and opportunities and requirements for career development. (Included as 03.32 00 00 00 *Retailing* under BUSINESS)
04.00 00 16 00	Retail Trends—A study of the changing retail environment and technological developments affecting retailing. In practice, pupils usually analyze current problems, review trade literature, examine research findings, and interpret business practices as related to management decisionmaking.
04.00 00 17 00	Wholesaling—The study of the problems, organization, and practices of wholesale establishments. Subject matter often includes wholesale merchandising and emphasizes the nature and structure of wholesaling, the distributing function, the warehousing function, sales analyses, stock control, and costs.
04.00 00 18 00	Buying—Organized learning experiences which are concerned with planning, obtaining, and controlling inventories of manufactured goods or raw materials for resale or processing.
04.00 00 19 00	Fashion Merchandising—The study of the major considerations involved in the buying and merchandising of fashion products. The subject matter usually includes principles of selection, the buyer's operation in the market, consumer buying patterns, and planning for profitable results.
04.00 00 20 00	Fashion Trends—The study of the fashion movement and factors which are significant in the analysis of potential trends. In practice, pupils usually (1) survey the sources of fashion ideas, analyze the influence of fashion on apparel, home furnishings, and other products, and (2) study the principles and specialized fashion techniques utilized by fashion directors and coordinators in wholesale and retail organizations.
04.00 00 21 00	Merchandise Mathematics—The study of the principles and mathematical processes applied to daily merchandising problems. The subject matter usually includes problems in computing markups and markdowns, stocksales ratios, invoice terms and dating, merchandise budgeting and interpretation of merchandising figures, and methods of inventory control.
04.00 00 22 00	Retail Buying—The study of the principles and procedures related to the buyer's job. The subject matter usually includes management problems of the store buyer, the organization for buying, resources, model stocks, buying plans, the techniques of buying, brand policies, and foreign buying.
04.00 00 23 00	Retail Merchandising—The study of the merchandising function and its relationship to buying, personal selling, sales promotion, store operations, and management. In practice, emphasis is frequently on sales and profit analysis, planning and expense control, techniques of merchandise adjustment to current conditions, and marketing strategy. (Included as 03.32 03 00 00 *Retail Merchandising* (*Selling*) under BUSINESS)
04.00 00 24 00	Other Buying—Include here other organized subject matter and activities emphasized in buying which are not listed above. (Specify.)
04.00 00 28 00	Credit and Collections—The study of credit and its economic significance and ralation to sales and profit objectives. Subject matter often includes retail and mercantile credit factors affecting credit policies, the investigation and extension of credit, types of credit instruments, records and credit analysis, collection systems and procedures, and legal remedies. (Included as 03.16 00 00 00 *Credit and Collections* under BUSINESS)
04.00 00 29 00	Marketing Management (General)—Planned learning experiences which are designed for the systematic study of the management function and management decisions in relation to marketing policies, organization, personnel, and financing. (Included as 03.26 04 00 00 *Merchandising Management* under BUSINESS)
04.00 00 30 00	Midmanagement (General) — The study and analysis of the management responsibilities of junior executives and supervisory personnel. Learning experiences frequently include directed occupational training and emphasize employee-management relations, administration of company policies, interpretation of records, profit controls, and product movement.
04.00 00 31 00	Personnel Management—A study of methods and policies applicable to personnel work in distributive businesses. Emphasis is frequently on employment practices, job evaluation, ratings, labor relations, and employee development. (Included as 03.26 06 00 00 *Personnel Management* under BUSINESS)
04.00 00 32 00	Retail Store Management—A study of the principal functions, departmental activities, and policies of retail stores. Frequently emphasis is on store organization and operations, including sales-supporting activities, expenses, location and layout, purchasing, and maintenance.

	(Included as 03.32 05 00 00 *Retail Store Management* under BUSINESS)
04.00 00 33 00	**Small Business Management**—A study of management functions, policies, and the practical experiences of managers of small business concerns. Emphasis frequently is on the nature of the managerial job, characteristics and special problems of the small businessman, and establishing and operating a small business successfully. (Included as 03.26 07 00 00 *Small Business Management* under BUSINESS)
04.00 00 34 00	**Other Marketing Management**—Include here other organized subject matter and activities emphasized in marketing management which are not listed above. (Specify.)
04.00 00 38 00	**Marketing Research**—Planned learning experiences which are designed for the systematic study of the institutions and channels for the marketing of goods and services, including the market environment and interpretation of data from consumer, business, and government sources. (Included as 03.27 00 00 00 *Marketing* under BUSINESS)
04.00 00 39 00	**Marketing Analysis**—Planned learning experiences which are concerned with the channels of distribution and decision-making regarding marketing expenditures. Subject matter generally includes the comparative advantages of different marketing channels, using an analytical approach to discovering opportunities for business to increase volume, reduce costs, and increase profits.
04.00 00 40 00	**Other Marketing Research**—Include here other organized subject matter and activities emphasized in marketing research which are not listed above. (Specify.)
04.00 00 44 00	**Advertising and Sales Promotion**—The study and development of skills concerned with the principles and theory of advertising as a mass marketing and communications tool, and the coordination of external and internal activities of a promotional nature. (Included as 03.02.00 00 00 *Advertising and Sales Promotion* under BUSINESS)
04.00 00 45 00	**Advertising Principles**—The study of the economic, sociological, and psychological aspects of advertising. Usually, this is a survey of paid forms of nonpersonal presentations of facts about goods, services, or ideas directed toward groups of people. Emphasis is on understanding media, the role of advertising in the marketing structure, and the different institutions involved in the creation of advertising. Included as 03.02 01 00 00 *Advertising Principles* under BUSINESS)
04.00 00 46 00	**Advertising Campaigns** — Planned learning experience which emphasize the coordination of sales policies, advertising appropriations, media selection, and marketing outlets for the purpose of developing demand for a product or a service. In practice, pupils often analyze and evaluate campaign procedures and plan one or more campaigns in relation to different promotional objectives. (Comprises portion of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS)
04.00 00 47 00	**Advertising Copywriting** — Planned learning experiences which emphasize the techniques used in creating effective advertising copy for various types of media. Application is frequently made to cases in national, retail, trade, mail order, industrial, and professional advertising. (Included as 03.02 02 00 00 *Advertising Copywriting* under BUSINESS)
04.00 00 48 00	**Advertising Layout**—Planned learning experiences which emphasize the principles, elements, techniques, and rules involved in creating an effective advertising layout. In practice, pupils usually plan and prepare layouts for various types of media.
04.00 00 49 00	**Advertising Media**—The study of all types of advertising media and the bases for their selection. The characteristics, advantages, and limitations of various media are analyzed, such as periodical media, mass media, television and radio, and direct-mail media. (Comprises portion of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS)
04.00 00 50 00	**Advertising Production**—The study of the production methods used to get a layout into print. Usually included for study are type and printing, engraving and plates, and specific applications to advertising materials.
04.00 00 51 00	**Commercial Design**—(For definition see 02.02 02 00 00 *Commercial Design* under ART.)
04.00 00 52 00	**Direct-Mail Advertising**—Organized learning activities which emphasize those forms of direct advertising that are sent through the mails. Usually included for study are the types and uses of direct mail, the development of mailing lists, requirements for successful direct-mail advertising, and practice in creating appropriate direct-mail material for a variety of prospective buyers. (Included as 03.02 04 00 00 *Direct-Mail Advertising* under BUSINESS)
04.00 00 53 00	**Retail Advertising**—A study of advertising as applied to the retail field. Emphasis frequently is given to newspaper advertising, the use of advertising at the point of sale, local resources, and direct media.
04.00 00 54 00	**Retail Display**—A study of the principles and methods of artistic merchandise display. Learning experiences usually involve the techniques of installing window and interior displays, display tools, equipment and mannequins, and practice in constructing different types of displays. (Included as 03.32 02 00 00 *Retail Display* under BUSINESS)
04.00 00 55 00	**Retail Sales Promotion**—A study of modern sales promotion practices used by different types of retail stores. Emphasis frequently is on the coordination of advertising, display, special events and personal selling; the development and implementation of sales promotion plans; and special techniques in relation to hard and soft lines of goods.
04.00 00 56 00	**Showcard Techniques**—The study and practice of showcard writing. Learning experiences usually include lettering, spa-

	cing, banner-making, showcard copy, and construction.
04.00 00 57 00	OTHER SALES PROMOTION—Include here other organized subject matter and activities emphasized in advertising and sales promotion which are not listed above. (Specify.)
04.00 00 61 00	PURCHASING—The study of the practices and problems which confront the purchasing agent. Subject matter often includes the sources of supply, market information, material specification, control inventories, and the purchase budget.
04.00 00 62 00	SALESMANSHIP—Planned learning experiences which emphasize the psychological and economic impact of selling and the fundamentals of sales ability. Emphasis frequently is on practices in wholesale, retail, and specialty salesmanship; buying motives; creating product acceptance; building goodwill; and the application of new techniques to tangible and intangible sales. (Included as 03.33 00 00 00 *Salesmanship Principles* under BUSINESS)
04.00 00 63 00	DIRECT SALES—The study and analysis of opportunities, activities in, and requirements for outside selling. In practice, emphasis frequently is on planning and delivering sales presentations, management of time, prospecting, company and product competition, practical demonstrations, and field experiences.
04.00 00 64 00	RETAIL SELLING—A study of the fundamentals of successful retail store selling. Learning experiences frequently include the analysis of consumer psychology, steps in the sales process, and the development of selling skills and techniques by means of sales demonstrations, role playing, and occupational experience. (Included as 03.32 04 00 00 *Retail Salesmanship* (*Selling*) under BUSINESS)
04.00 00 65 00	SALES MANAGEMENT—The study of the operation of a sales organization involved in the outside selling of goods and/or services. The subject matter usually includes sales forecasting, hiring, evaluating, and supervising the sales force; managing territories and routes; and correlating the sales activities with those of production and other departments of the business enterprise.
04.00 00 66 00	OTHER SELLING—Include here other organized subject matter and activities emphasized in selling which are not listed above, (Specify.)
04.00 00 70 00	TRANSPORTATION—The study of practices and relationships in the physical distribution of merchandise. Subject matter often includes principles of traffic management; characteristics of air, motor, rail, and water transportation; pickup and delivery; consolidation; and finance.
04.00 00 71 00	PRINCIPLES OF INSURANCE—The study of the foundations of the standard forms of insurance and the functions of those following an insurance career. Subject matter usually emphasizes the practices and major coverages involved in life, fire, casualty, automobile, and property insurance; the nature of risk; the social and economic services of insurance; and insurance as a vocation. (Included as 03.24 01 00 00 *Principles of Insurance* under BUSINESS)
04.00 00 72 00	LIFE INSURANCE—The study of the fundamentals of life insurance. Subject matter usually emphasizes the role of the salesman in analyzing the nature of personal risks or life contingency risks of businessess, types and functions of contracts, premium costs, proceeds, and insurance company operation, (Included as 03.24 02 00 00 *Life Insurance* under BUSINESS)
04.00 00 73 00	CASUALTY INSURANCE—The study of the fundamentals of casualty insurance. Subject matter usually emphasizes selling skills in the fields of automobile, liability and theft insurance; the nature of contracts, benefits, and premiums; and controls and bonding. (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS)
04.00 00 74 00	PROPERTY INSURANCE—The study of fundamentals of property insurance. Subject matter usually includes the principles and practices involved in fire insurance and extended coverage, and marine insurance. Instruction emphasizes sales and management opportunities and problems and procedures in agency or home office work. (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS)
04.00 00 75 00	REAL ESTATE PRINCIPLES—The study of the economic factors affecting real estate, regulations, practices, and professional ethics of the real estate business. Usually, this includes a survey of problems involved in the acquistion, ownership, use, and disposition of real estate interests. (Included as 03.31 01 00 00 *Principles of Real Estate* under BUSINESS)
04.00 00 76 00	REAL ESTATE PRACTICES—Planned learning experiences which emphasize the techniques of operating a real estate business and the actual procedures involved in the daily activities of brokers and salesmen. In practice, pupils usually develop skills needed in selling, prospecting, listing, making financial arrangements, effective advertising, and ethical relationships.
04.00 00 77 00	REAL ESTATE MANAGEMENT—The study of the fundamentals of property management. The subject matter usually includes the economics of real estate, managing income properties, methods of promotion, professional standards, and the functions and qualifications of the property manager. (Included as 03.31 05 00 00 *Real Estate Management* under BUSINESS)
04.00 00 78 00	REAL ESTATE LAW—The study of the legal aspects of property and property rights. The subject matter usually includes legal practices as they apply to real estate ownership, operations, instruments, and various phases of the real estate business. (Included as 03.31 04 00 00 *Real Estate Law* under BUSINESS)
04.00 00 79 00	REAL ESTATE APPRAISAL—Planned learning experiences which emphasize the factors affecting the value of farm, residential, commercial, and industrial real estate. In practice, pupils usually

	develop appraisal proficiency by means of field work on property and making application of appraisal techniques, including the preparation of the appraisal report. (Included as 03.31 02 00 00 *Real Estate Appraisal* under BUSINESS)
04.00 00 80 00	REAL ESTATE FINANCE—The study of the sources and availability of funds, and the procedures for financing real estate. The subject matter usually includes financial analyses of real properties, types of lenders, management servicing, and repayment of loans, government aids, regulations, and trends. (Included as 03.31 03 00 00 *Real Estate Finance* under BUSINESS)
04.00 00 81 00	REAL ESTATE SALES—The study of the fundamentals of real estate transactions. The subject matter usually includes analyzing residential and income properties, listing and showing property, prospecting and qualifying prospects, trades, modernization, regulations, and practices governing the sale or purchase of real property. (Included as 03.31 06 00 00 *Real Estate Sales* under BUSINESS)
04.00 00 82 00	PRODUCT INFORMATION—The study of the characteristics of specific products or services transferred during the marketing process. The subject matter usually includes the techniques of handling specific products performing personal or business services; the identification of values to customers; regulations and controls; and sources of product information used by consumers and the trade. (Included as 03.32 01 00 00 *Merchandise Information (Product Information)* under BUSINESS)
04.00 00 83 00	NONTEXTILES—The study of consumer products other than fabrics or soft-line merchandise. The subject matter usually includes materials used, their construction and care, and government regulations. Emphasis is on the values to consumers of different types and qualities of merchandise.
04.00 00 84 00	TEXTILES—The study of fabrics and soft-line merchandise which are generally classified as apparel, domestics, or home furnishings. The subject matter usually includes the properties of natural and man-made fibers, fabric construction and finishes, appropriate utilization, values to the consumer, and marketing techniques.
04.00 00 85 00	ACCOUNTING—(For definition see 03.01 00 00 00 *Accounting* under BUSINESS.)
04.00 00 86 00	BUSINESS-GOVERNMENT RELATIONSHIPS—The study of the economic aspects of public policy affecting the market processes. The subject matter usually includes an analysis of Federal, State, and local regulations; restraints of trade; monopoly; purposes and effect of laws relating to competition; the giant corporation; and international and domestic cartels.
04.00 00 87 00	BUSINESS LAW—(For definition see 03.09 00 00 00 *Business Law* under BUSINESS)
04.00 00 88 00	COMMUNICATIONS FOR DISTRIBUTION—Organized learning experiences which are concerned with the application and refinement of skills in reading, speaking, listening, and writing in distributive employment. (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)
04.00 00 89 00	ECONOMICS OF CONSUMPTION—The study of the place of the consumer and his problems in the economic system. The subject matter usually is concerned with the relationship of personal income to price levels; the role of the consumer in determining the amount of the national income and the stability of the economic system; and the effect of consumer liquid assets and availability of consumer credit on total consumer demand. (See also 15.06 03 00 00 *Consumer Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)
04.00 00 90 00	ECONOMICS OF MARKETING—A study of the contributions of economic theory to the managerial problem of price determination and price policy. The subject matter usually includes demand and cost curves, survival and growth, values added by distribution, and problems of introducing the results of technological progress into the market.
04.00 00 91 00	EFFECTIVE STORE SPEECH—Planned learning activities which emphasize the development of facility in oral communications. The subject matter usually stresses the organization of ideas, product and marketing vocabulary, clarity of expression, telephone usage, and practice in the techniques used in different communications situations.
04.00 00 92 00	EMPLOYEE SUPERVISION—The study of supervisory relationships and practices in distribution and marketing. The subject matter usually includes techniques of employee induction, morale building, followup and evaluation, correction, grievances, and an analysis of leadership and motivation.
04.00 00 93 00	EMPLOYEE TRAINING—The study of the principles, organization, and techniques of individual and group training in distributive occupations. The subject matter usually includes the development of initial and followup programs, department and sales meetings, practice training in skills, and acquisition of information.
04.00 00 94 00	EVALUATION TECHNIQUES—The study of job evaluation and procedures for implementing an evaluation program. The subject matter usually includes systems of and steps in organized evaluation, job ranking, rating devices, performance reviews, and the effect of evaluation on personnel supervision and administration.
04.00 00 95 00	EXPENSE CONTROL—The study of practices and trends in expense control. The subject matter usually includes an analysis of expense items, the relationship of expense control to net profit, planning and adjustment to current conditions, and available tools for stock and dollar management.
04.00 00 96 00	HUMAN RELATIONS—Organized learning experiences which are concerned with personal effectiveness in relation to customers, to the distributive business, to employees, and to job activities. (See also 03.11 00 00 00 *Business Psychology* under BUSINESS.)

04 DISTRIBUTIVE EDUCATION—Continued

04.00 00 97 00 REPORT WRITING—(For definition see 03.06 02 00 00 *Report Writing* under BUSINESS.)

04.00 00 99 00 OTHER SUBJECT MATTER IN DISTRIBUTIVE EDUCATION—Include here other organized subject matter and activities emphasized in distributive education not listed above or classifiable in one of the above major categories. (Specify.)

ENGLISH LANGUAGE ARTS

05.00 00 00 00

English language arts is comprised of the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with developing (1) an understanding of the language system; (2) proficiency and control in the use of the English language; (3) appreciation of a variety of literary forms; (4) understanding and appreciation of various aspects of past and present cultures as expressed in literature; and (5) interests which will motivate lifelong learning.

The Ad Hoc Committee for English Language Arts applied the following rationale to the selection of substantive content for placement in the English Language Arts subject-matter area: (1) the content was determined by consensus of the committee to be appropriate to English language arts; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under English Language Arts were identifiable by titles which were considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of English language arts as an integral part of the instructional program. As an example, the Journalism Club provides additional opportunities to develop leadership, other qualities, and an understanding of the role of journalism in society. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Journalism Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 17 00 00.

Included under this heading are the items of information which identify various aspects of subject matter in the English language arts subject-matter area.

05.01 00 00 00 **LANGUAGE SKILLS**
Subject matter and experiences concerned with knowledge, understanding, and skills designed to develop competency in the use of language. Emphasis is on (1) oral language involving "intake" (listening), and "output" (speaking), and (2) written language involving "intake" (reading), and "output" (writing). Activities include the development of vocabulary, concepts, interpretations, reactions and responses, and concentration on skills in writing, reading, speaking, listening.

05.01 01 00 00 **Reading**—Instruction designed to develop the skills necessary to perceive and react to patterns of written symbols and translate them into meaning. The teaching of reading is differentiated according to a number of levels and objectives. The continuous development of reading skills and vocabulary applies to all subject-matter areas, emphasizing selected skills and vocabulary appropriate to pupils' needs in different learning situations.

05.01 01 01 00 READING READINESS—A variety of planned activities designed to develop in children the mental, physical, and emotional maturity prerequisite to instruction in reading. In practice emphasis is placed on a variety of learning situations, e.g., direct and vicarious experiences involving oral language, such as listening, speech habits and patterns, developing sequential organization of ideas, vocabulary development, and experience with books and stories.

05.01 01 02 00 BEGINNING READING—The initial activities involved in teaching pupils to read, following necessary readiness activities. These reading activities are designed to develop understanding of the relationship between oral and written language, recognition of symbols (letters) and symbol-sound relationships, and appreciation of the reading process.

05.01 01 03 00 DEVELOPMENTAL READING PROGRAM—A program of learning experiences designed to help pupils develop sequentially all aspects of reading proficiency needed by a mature reader. This program may be centered in a series of basal readers and their accompanying learning aids, in an individualized plan which utilizes an extensive library or utilizes reading in all of the materials of the content subjects. Each of these plans includes attention to oral and silent vocabulary development, comprehension, critical reading, speed and the adjustment of reading techniques to varying needs.

05.01 01 04 00 BASAL READER PROGRAM—Systematic learning experiences which are developed through a series of basic reading books and materials designed in sequential steps for successive levels of instruction.

05.01 01 05 00 REMEDIAL READING—Planned diagnostic and remedial activities, for individual pupils or groups of pupils, designed to correct and prevent further reading difficulties which interfere with the pupil's expected progress in developing reading skills, understandings, and appreciations.

05.01 01 06 00 INDIVIDUALIZED READING—A reading program which utilizes an extensive library and permits self-selection of materials and pacing suited to each pupil. The development of skills is guided through individual conferences and individual or small-group teaching. An individualized reading program or a portion of this program may be part of another type of reading program.

05.01 01 07 00 ORAL READING—The reading aloud of printed materials. In practice, oral reading is used for a variety of purposes, e.g., to develop listening skills, to develop skills in pronunciation, to develop ability in translating and interpreting ideas from written words through oral expression, and to aid pupils in understanding patterns in linguistic structures.

05.01 01 08 00 INITIAL TEACHING ALPHABET (ITA)—A decoding system using a 44-character alphabet (each character representing a distinct sound) instead of the standard 26-letter alphabet (in which the vowels and consonants represent varying sounds).

05.01 01 99 00 OTHER READING—Include here other organized subject matter and experiences emphasized in reading which are not listed above, e.g., notetaking and outlining skills. (Specify.)

05.01 02 00 00 **Handwriting (Penmanship)**—Instruction designed to assist pupils in learning the processes and developing the skills involved in using an inscribing instrument to record manually material to be read.

05.01 02 01 00 MANUSCRIPT WRITING—Instruction designed to assist pupils in learning the processes and developing the skills involved in a style of handwriting which makes use of variations of printed letter forms.

05.01 02 02 00 CURSIVE WRITING—Instruction designed to assist pupils in learning the processes and developing the skills used in inscribing a style of handwriting utilizing flowing lines and connecting letters with strokes which have rounded angles.

05.01 02 99 00 OTHER HANDWRITING—Include here other organized subject matter and experiences emphasized in handwriting which are not listed above. (Specify.)

05.01 03 00 00 **Spelling**—Organized subject matter, experiences, and learning activities concerned with developing the mind-eye-hand coordinations and memory involved in ordering letters into whole words according to standard written usage.

05.01 04 00 00 **Punctuation**—Experiences designed to develop an understanding of the established system of points or marks used in written English to indicate the syntactic units in their interrelationships. The relationship of the marks to syntactic factors (such as sentence, clause, and phrase), to rhetorical factors (such as emphasis, parallelism, and subordination), and to voice factors (intonation patterns) may all be shown.

05.01 05 00 00 **Listening**—Activities which are planned to sharpen children's listening skills and to foster appreciative, attentive, and analytical listening with increasing skill. (See also 05.05 01 04 00 *Listening* under *Speech.*)

05.01 06 00 00 **Dictionary Skills**—Experiences designed to develop an understanding of the process by which dictionaries are constructed and the type of information available from this source, together with the skills needed to locate and use this information.

05.01 07 00 00 **Reference Skills**—Experiences designed to develop an understanding of the many types of reference materials and the type of information particular to each, together with the development of the skills needed to use these references effectively and efficiently.

05.01 08 00 00 **Voice and Diction**—(For definition see 05.05 03 01 00 *Voice and Diction* under *Speech.*)

05.01 99 00 00 **Other Language Skills**—Include here other organized subject matter and experiences emphasized in language skills which are not listed above. (Specify.)

05.02 00 00 00 **LINGUISTICS**

The descriptive, historical, and theoretical study of language as such, its nature, structure, varieties, and history, including especially the sound system (phonology), grammatical system (morphology, syntax), lexical system (vocabulary, semology), and writing system.

05.02 01 00 00 **Phonology**—The descriptive, historical, and theoretical study of the sound system of language or languages.

05.02 01 01 00 PHONETICS—The division of phonology dealing with the study and classification of the sounds of speech as spoken and heard.

05.02 01 02 00 PHONEMICS—The division of phonology dealing with the study of distinctive units and structural patterns within the sound system of a specific language or dialect.

05.02 02 00 00 **Grammar**—The division of linguistics including primarily morphology and syntax; hence the study by various methods of the structural devices by which the meaning-bearing units of a language (morphemes, words, phrases, sentences) are identified and their relationships indicated.

05.02 02 01 00 TRADITIONAL GRAMMAR—The study of the type of English grammar commonly taught in schools from the nineteenth century on, generally using semantic criteria for identifying "parts of speech" and other categories derived from Latin grammar, emphasizing sentence analysis, and often normative in character and prescriptive in application.

05.02 02 02 00 STRUCTURAL GRAMMAR (DESCRIPTIVE)—Study concerned with the type of grammar which objectively describes and analyzes the structure of a language in terms of (1) formally identifiable units in a hierarchy of increasingly complex combinations and (2) the immediate and ultimate constituents of sentences. (The term "Descriptive Grammar," sometimes used as an equivalency of "Structural Grammar," properly includes any kind of grammar derived inductively from objective observation of a body of utterances in a language.)

05.02 02 03 00 GENERATIVE GRAMMAR—The type of grammar which uses a set of rules, in a required order, capable of generating (or accounting for) all possible grammatically acceptable sentences of a language. The rules are commonly expressed as formulas composed of symbols standing for linguistic units and operations.

05.02 02 04 00 TRANSFORMATIONAL GRAMMAR—A type of grammar (usually generative, q.v.) which explains certain constructions as being derived from others by processes of structural change without change of meaning (i.e., by transformations).

05.02 03 00 00 **Usage (Functional Grammar)**—The study and teaching of the ways in which certain selected features of a language, especially those not "system-centered" or covered by general rules, are employed (the descriptive approach) or should be employed (the prescriptive approach). The features may be grammatical, lexical, or other, and they may be seen in relation to (1) the social of esthetic milieu (c,g., illiterate, common, and cultivated) and (2) the use they are put to (e.g., conversation, or formal address). In school practice, where a standard form of the language is to be inculcated, the prescriptive approach necessarily obtains; this is acceptable, however, if prescriptions are soundly based on accurate descriptions.

05.02 04 00 00 **History of the English Language**—The study of the ways in which the Anglo-Saxon dialects transplanted to Britain in the fifth century A.D. developed in the course of time into the language called "English," today. Any or all aspects of the broad subject are included, but attention centers especially on the "outer history" (the influence of nonlinguistic factors such as social and political change) and the "inner history" (the processes of general language change as they affected this specific language).

05.02 05 00 00 **Dialectology**—The study of the features of a language, written or spoken (sounds, forms, constructions, words), as they vary individually or in related groups with respect to their distribution, geographical or social. Theoretically, it can be synchronic (of a single point in time); practically, it is diachronic (historical), since the variations can be understood only as the result of developments occurring over a span of years. "Dialects" are often thought of as those varieties within a language which have more features in common with each other than they have separately.

05.02 06 00 00 **Semantics (Semology)**—The historical and descriptive study of meaning as a linguistic phenomenon, including the structure of the meaning system of a language or set of languages; the components of meaning and their combination in larger structures of meaning; the association of meanings with morphemes and words; and the systematic study of meaning change. This approach is to be distinguished from GENERAL SEMANTICS (see 05.04 01 03 00 *General Semantics*), which is defined by Webster *III* as "a doctrine and educational discipline due to Alfred Korzybski (1879–1950) intended to improve habits of response of human beings to their environment and one another especially by training in the better and more critical uses of words and other symbols." Specifically, the study of SEMANTICS deals with meaning as a system within the overall structure of language; GENERAL SEMANTICS deals with meaning as a relationship between linguistic signs and the outside world.

05.02 07 00 00 **Study About Language**—A cover term used to include any instruction about language or languages (as distinct from instruction *in* a language or training in the skills of using language) which may be included in the curriculum from the elementary grades on, but which is not formal and developed sufficiently to be denominated LINGUISTICS (q.v.).

05.02 99 00 00 **Other Linguistics**—Include here other organized subject matter and experiences emphasized in linguistics which are not listed above. (Specify.)

05.03 00 00 00 **LITERATURE**

The study of printed materials which have noteworthy content and excellence of style, and which may be identified by country, type, and/or period of time. Such study may be directed to bodies of national literature such as American and British, or may be more inclusive as in World Literature, which term usually includes Oriental literary works. The types usually considered in the study of literature are biography, drama, essay, fiction, and poetry. Myths and legends are sometimes considered as types. Often the focus is on specialized areas as in "Biblical literature" and "classical literature." Occasionally, literary works are selected for a special group as in "children's literature" and "literature for adolescents." For developing taste and critical judgment, writing and discussion are frequently a means of instruction in the study of literature.

By Source:

05.03 01 00 00 **American Literature**—The study of selected American literary works of various types. Such subject matter is usually related to the development of distinctive qualities of the national literature through use by writers of indigenous materials. The study may be conducted within an historical framework or within an organization by themes or by literary types. (See also 05.03 00 00 00 *Literature.*)

05.03 02 00 00 **Biblical Literature**—The study of selected portions of the Old and New Testaments with attention to literary qualities and to ideas which have importance in the spiritual and intellectual life of western man. Frequently, attention is given to stories, events, and persons used or alluded to by western writers, artists, and musicians.

05.03 03 00 00 **Classical Literature**—The study of selected literary works of ancient Greece and Rome. Special attention is frequently given to materials which have been used or alluded to by more recent writers. (See also 05.03 00 00 00 *Literature.*)

05.03 04 00 00 **English Literature**—The study of selected English literary works of various types. These works can be approached within successive historical periods of English history with attention to differences in the cultural settings and varying styles of literary expression. (See also 05.03 00 00 00 *Literature.*)

05.03 05 00 00 **World Literature**—The study of selected literary works of Western and Eastern cultural origin from ancient times to the present. Such study frequently includes religious and philosophic works which have literary excellence. (See also 05.03 00 00 00 *Literature.*)

05.03 35 00 00 **Other Literature by Source**—Include here other organized subject matter and experiences emphasized in literature—by source—which are not listed above. (Specify.)

By Genre:

05.03 36 00 00 **Biography**—The study of the lives of persons in narrative accounts which have stylistic and other formal qualities that make them noteworthy as literary works. Techniques of presentation have been developed through ages; and many of these have aimed to reveal the character of the subject as well as the facts of his life. Biographies often serve to satisfy young peoples' search for ideals and values.

05.03 37 00 00 **Drama**—The study of a type of literature distinguished by plot, setting, theme, and characters engaged in movement and dialogue. It is distinguished from narrative by being a direct presentation of action. The main types and styles of dramatic literature usually studied are: tragedy, comedy, melodrama, farce, social drama of ideas, classical, romantic, realistic, impressionistic, and expressionistic. The structure of a drama, its plot, and the techniques by which character is revealed are primary items for consideration in the study of a drama. Dramas are often expressions of a philosophy or social point of view of the dramatist, and often serve as excellent revelations of the temper of a historical period or of a culture. Appreciation of the literary qualities of a drama may be enhanced by its being read as an artistic creation intended for performance on a stage.

05.03 38 00 00 **Essay**—The study of expository writings of a formal and informal kind. The formal may include short or extended articles which present ideas or information, the writer's purpose frequently being to set forth a central idea or thesis. Informal essays, or familiar essays as they are sometimes called, may be read for a revelation of the writer's personality and subjective reactions to an experience or to an event which he has observed.

05.03 39 00 00 **Fiction**—The study of short stories and novels with special attention to point of view, plot, character, setting, and theme. Frequently, teachers select fictional works in accordance with their suitability for pupils' developmental levels and their needs and interests.

05.03 40 00 00 **Poetry**—The study of literary selections which are characterized by rhythm, imagery, words chosen for their connotative values, and varied figures of speech, especially similes and metaphors; they may or may not have rhyme. Poems may be studied by types, or they may be arranged by theme and studied in relation to theme. They sometimes are studied within an historical framework of literary periods; when studied in such contexts they may be considered as expressions of the spirit of the era in which they were written. However, they have most frequently been regarded as revelations of writers' emotions and ideas.

05.03 65 00 00 **Other Literature by Genre**—Include here other organized subject matter and experiences emphasized in literature—by genre—which are not listed above. (Specify.)

05.03 66 00 00 **Children's Literature**—The study of the portion of the larger body of literature which has both appeal and interest to children and is understood by them. Literature for children can be found in the various genres and can be obtained from both English and other sources. It extends from picture books designed specifically for young children to adult reading material.

05.03 67 00 00 **Literature for Adolescents**—The study of that portion of the larger body of literature which has both appeal and interest and can be understood by young people of the age range commonly called "adolescent." Literature for adolescents can be found in the various genres and can be obtained from both English and other sources.

05.03 68 00 00 **Myth and Legend**—The study of stories, ballads, and plays which have come from the oral tradition of national groups and which constitutes a part of their literature. Such folk material is sometimes organized as a unified body, but is more frequently combined with other literary works into thematic or type arrangements. Appreciation of esthetic qualities of such selections is often enhanced by their being sung, recited, or performed.

05.03 69 00 00 **Humanities**—The study of a group of related subjects such as literature, art, music, religion, history, philosophy, and classical and modern languages—with literary works usually forming the core—concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject matter areas are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.07 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

05.03 99 00 00 **Other Literature**—Include here other organized subject matter and experiences emphasized in literature which are not classified or listed above. (Specify.)

05.04 00 00 00 **COMPOSITION**

Learning activities concerned with the art of selecting, combining, and arranging words in connected discourse.

05.04 01 00 00 **Theory**—The study of the form of composition emphasizing dependence on principles and rules which have evolved through time, as well as dependence on personal abilities and the language to be used. On the basis of the language used, the pupil selects from his ideas those which can best be arranged in a form to which an individual may respond. Mental ordering of the ideas precedes writing them. Ideas are explored, experimented with, and revised through writing.

05.04 01 01 00 LOGIC—The study of the formal principles frequently included in composition courses with the objective of improving the reasoning of the writer. Principles of inductive and deductive thinking and possible errors in such thinking form the basis of this instruction. Some of the topics usually included in the study of inductive reasoning are: the testing of the adequacy of evidence; the validity of generalizations; the cause and effect relationship—oversimplification and the attribution of false cause; the invalidating factor of difference in reasoning by analogy. The validity of the premises and their relationship to each other and to the conclusion in a syllogism are the essential topics in the study of deductive reasoning. The work in logic in a composition course also usually includes attention to the pitfalls of circular reasoning, begging the question, avoiding the issue, and arriving at a false or irrelevant conclusion. Emphasis is given in such instruction, not to the detection of errors in thinking found in other people's speech and writing, but to the avoidance of them in one's own.

05.04 01 02 00 Rhetoric—The study of the art of discourse and its various meanings, one of which is the same as that of "composition." Composition courses are sometimes referred to as rhetoric courses. Originally, in classic times, the term was applied to oratory, but in modern times it is also applied to written communication. Considered as the theory of composition, the term applies to the principles and rules of composition formulated by ancient critics and modified through the ages by theorists of the composing art. Generally, the subject matter and experiences involved in the study of these principles and rules are designed to aid in the arrangement of a speech or written discourse to bring about a desired effect on a listener or reader. Emphasized are: methods of persuasion; the effective and orderly arrangement of the parts of a discourse; style; and rhetoric as a system of gathering, arranging, and expressing the subject matter of discourse, and as a guide for making decisions in the process of composition. (See also 05.05 01 00 00 *Rhetoric and Public Address* under *Speech.*)

05.04 01 03 00 General Semantics—The body of principles sometimes included for study and application in composition courses. The primary purpose of general semantics as a discipline, or as a point of view, in the field of communication is to improve language habits so that verbal symbols correspond more exactly to persons, things, and events on the nonverbal or fact level. It is the study of evaluative processes, the ways in which a person interprets his environment through signs and symbols, including language. Attention is usually given to: factual as distinguished from inferential statements; multivalues in nature as distinguished from two-valued orientation in the language of writers or speakers; verbal abstractions as distinguished from low-order terms; indexing or noting differences to avoid stereotyping; dating to avoid rigidity; emotive language and its effects on human behavior; the distinction between a thing and its label or name; and the contexts of language.

05.04 02 00 00 **Writing**—Learning experiences designed to provide opportunities for pupils to develop knowledge, understanding, and skills essential to self-expression, e.g., ideas, interests, and facts, in written language. Writing forms vary according to the content, the audience, and the purpose of the writer.

05.04 02 01 00 Expository Writing—Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with selecting, ordering, and explaining information in a detailed, logical manner.

05.04 02 02 00 Persuasive Writing—Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with selecting and organizing ideas for presenting a particular point of view in a persuasive manner—employing inference and logic.

05.04 02 03 00 Creative Writing—Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing that is free, not prescriptive, and expresses primarily the interest and emotions of the writer, particularly the personal satisfaction that the writer feels.

05.04 02 04 00 Narrative Writing—Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with telling a story in a sequentially organized manner.

05.04 03 00 00 **Journalism**—The study and practice of writing, editing, and publishing newspapers and periodicals. Instruction usually emphasizes reporting and feature and editorial writing. (See also the category 05.05 04 00 00 *Speech Through Mass Media.*)

05.04 03 01 00 Reporting—The study and practice of gathering facts about current events and writing about such events for publication in newspapers and periodicals.

05.04 03 02 00 Editorial Writing—The study and practice of composing an article of opinion or comment for publication in a newspaper or periodical.

05.04 03 03 00 Feature Writing—The study and practice of composing an article with strong emotional or human interest appeal for publication in a newspaper or periodical.

05.04 03 04 00 History of Journalism—The study of the financial, technical, and editorial processes and the contributions of individuals involved in the publishing of newspapers and periodicals from the beginnings of such publications to the present.

05.04 03 99 00 Other Journalism—Include here other subject matter emphasized in journalism which is not listed above. (Specify.)

05.04 99 00 00 **Other Composition**—Include here other organized subject matter emphasized in composition which is not listed or classifiable above. (Specify.)

05.05 00 00 00 **SPEECH**

Subject matter and experiences comprised of a wide spectrum of studies and activities that range from the scientific (voice science) through the humanistic (rhetoric) and the behavioral sciences (group dynamics) to the artistic (oral interpretation of literature). The unifying feature of these studies and activities is the predominance, in varying degrees, of oral communication.

05.05 01 00 00 **Rhetoric and Public Address**—The study of the practical arts of speaking as revealed in the variety of forms and functions evident in public discourse. Emphasized are speech-making (composition and delivery), argumentation and debate, audience analysis and listening behavior, persuasion, discussion, parliamentary procedure, speech criticism, and the history of rhetoric and public address. (See also 05.04 01 02 00 *Rhetoric* under *Composition.*)

05.05 01 01 00 Public Speaking—The study of theory and practice involved in composing and delivering speeches, including informative, persuasive, and inspirational types.

05.05 01 02 00 Argumentation and Debate—Study and practice in the discovery, selection,

	analysis, organization, and presentation of evidence and argument for and against a proposition, often in formal debate. (See also the category 05.04 02 00 00 *Writing.*)
05.05 01 03 00	COMMUNICATION THEORY—An analysis of the communication process, including the psychology of the listener, information theory, message formulation, and dissemination.
05.05 01 04 00	LISTENING—The exploration and study of the theory of listening with oral-aural practice in the skills of comprehension through listening. (See also 05.01 05 00 00 *Listening* under *Language Skills.*)
05.05 01 05 00	DISCUSSION—The exploration and study of evidence and issues, through analysis and oral exchanges, leading toward the identification of problems and the formulation of possible solutions. Included are study and practice in the use of the various forms of discussion: informal groups, committees, conferences, panels, symposiums, forums, et al.
05.05 01 06 00	SPEECH CRITICISM—A study of rhetorical theory, past and present, including a critical examination of recorded speeches and their contexts.
05.05 01 07 00	PARLIAMENTARY PROCEDURE—A study of the theory, with opportunities for practice, of the rules and procedures used in conducting formal meetings.
05.05 01 08 00	PERSUASION—Subject matter and experiences designed for intensive study and practice in the composition and delivery of speeches that are designed, through the use of appropriate rhetorical techniques and motivational patterns, to change or strengthen beliefs or to secure action.
05.05 01 99 00	OTHER RHETORIC AND PUBLIC ADDRESS—Include here other organized subject matter and experiences emphasized in rhetoric and public address which are not listed above. (Specify.)
05.05 02 00 00	**Oral Interpretation of Literature**—The study of principles, and opportunities for practicing the art of analyzing and reading literature aloud to others.
05.05 02 01 00	CHORAL SPEECH—The theory and practice of group readings of literary works.
05.05 02 02 00	READERS' THEATRE—The analysis and performance of dramatic works embodying the principles of oral interpretation of literature as opposed to those of acting.
05.05 03 00 00	**Speech Improvement**—Subject matter and experiences concerned primarily with the acquisition, largely through study and exercises, of such basic language skills as adequate projection, articulation, phrasing, vocal variation, and appropriate usage.
05.05 03 01 00	VOICE AND DICTION—The study, and application through exercises, of knowledge about voice production and the means for improving projection, articulation, pronunciation, phrasing, melody patterns, et al., and for developing where needed, often through the use of phonetics, standard usage.
05.05 03 99 00	OTHER SPEECH IMPROVEMENT—Include here other organized subject matter and experiences emphasized in speech improvement which are not listed above. (Specify.)
05.05 04 00 00	**Speech Through Mass Media**—The study and practice of the techniques and procedures of mass media as well as the identification of artistic features unique to each medium. The study of history and criticism is usually coupled with experiences in the arts of radio, television, and/or films.
05.05 04 01 00	RADIO AND TELEVISION—A study of broadcasting, with exercises, where appropriate, that include its history, its role in contemporary society, its artistic dimensions, its production techniques, principal genres, et al.
05.05 04 02 00	FILM——A study of, and in some instances practice in, the cinematographic arts including history, production, and criticism.
05.05 99 00 00	**Other Speech**—Include here other organized subject matter and experiences emphasized in speech which are not classifiable or listed above. (Specify.)
05.06 00 00 00	**DRAMATIC ARTS** Subject matter and experiences concerned with a wide range of studies and activities including playwriting, dramatic literature, scenic design, acting, directing, and the supporting arts and crafts of the theatre and of selected aspects of radio, television, and film.
05.06 01 00 00	**Acting**—Theory and practice in the art and craft of interpreting roles from dramatic literature for presentation on the stage or through certain mass media.
05.06 02 00 00	**Dramatic Literature**—The study of the types, forms, and styles of plays from both the past and the present with special emphasis on the elements of production that are used in transposing a manuscript into living theatre.
05.06 03 00 00	**Creative Dramatics**—Learning activities wherein pupils, using nondramatic literary materials created by themselves or by others, create informal, nonscripted plays using their own words and movements.
05.06 04 00 00	**Play Production**—The study of, coupled with opportunities for practical experience with, such component elements in producing plays as directing, staging, costuming, makeup, properties, and business management.
05.06 05 00 00	**Playwriting**—A study of the theory of dramatic writing (form, structure, style) coupled with an examination of representative plays and appropriate exercises in writing.
05.06 06 00 00	**Technical Theatre and Design**—An intensive study of the physical aspects of play production including scenic design, costume design, lighting design, and stagecraft with opportunities, frequently in conjunction with cocurricular activities, for practical experiences.
05.06 07 00 00	**Theatre Criticism**—The study of the theatre including, frequently, the related arts of film and television emphasizing such elements as esthetics, social impact, and historical perspective.
05.06 08 00 00	**Theatre History**—The study of the development of dramatic literature, the physical theatre, the elements of production, and the artists and craftsmen who have contributed to our theatre heritage.
05.06 99 00 00	**Other Dramatic Arts**—Include here other organized subject matter and experiences emphasized in dramatic arts which are not listed above. (Specify.)

05 ENGLISH LANGUAGE ARTS—Continued

05.99 00 00 00	**OTHER ENGLISH LANGUAGE ARTS** Include here other organized subject matter and experiences emphasized in English language arts which are not classifiable or listed above. (Specify.)

FOREIGN LANGUAGES
06.00 00 00 00

The body of subject matter in this area is comprised of a variety of foreign languages, including English as a foreign language. Classified under this heading are the various classical and modern foreign languages.

Usually, the activities involved in the teaching and learning of a foreign language are planned in terms of selected objectives:

1. to assist the pupil in acquiring progressive proficiency in the control of the skills of listening comprehension, speaking, reading, and writing, and in structural analysis;
2. to develop the pupil's capacity to apply these acquired skills in understanding, analyzing, and interpreting a variety of forms of past and current thought;
3. to increase the pupil's knowledge and understanding of the countries, cultures, and attitudes of the peoples whose language is being learned.

The Ad Hoc Committee for Foreign Languages applied the following rationale to the selection of the languages for placement in the Foreign Languages area: (1) the various languages selected and classified were determined by the *ad hoc* committee as including the languages most frequently taught in the United States; and (2) the various languages selected for placement under Classical Languages and Modern Foreign Languages could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of foreign languages as an integral part of the instructional program. As an example, the Foreign Language Club provides additional opportunities to apply various acquired skills, increase knowledge about different countries, and develop appreciation for the role of foreign languages in communication. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities.* A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Foreign Language Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 09 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96 Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

The following and other categories of information in chapters 3 and 4 of Handbook VI, when related to a foreign language, may provide the type of information represented by "stream" and "level" (which are not defined here): X 03 00. Series—Placement, on pages 63–65; X 06 00. Series—Time Elements, on pages 66–71; and the X 23 00. Series—Planned Instructional Outcomes for Pupils, on pages 89–90.

06.01 00 00 00	**CLASSICAL LANGUAGES** Usually considered to be the study of the language, literature, and culture of an ancient civilization. Selected emphases in instruction in any of the classical languages may be identified in the list of items following 06.01 99 00 00. An example might be: language taught, 06.01 01 00 00 *Arabic (classical)*; emphases in instruction, 06.01 01 01 00 *Culture* and 06.01 01 02 00 *Listening Comprehension.*
06.01 01 00 00	**Arabic (classical)**—The language, literature, and culture of the ancient Arabic world.
06.01 02 00 00	**Chinese (classical)**—The language, literature, and culture of the ancient Chinese world.
06.01 03 00 00	**Greek (classical)**—The language, literature, and culture of the ancient Greek world.
06.01 04 00 00	**Hebrew (classical/Biblical)**—The language, literature, and culture of the ancient Hebrew world.
06.01 05 00 00	**Latin (classical)**—The language, literature, and culture of the ancient Roman world.
06.01 99 00 00	**Other Classical Languages**—Include here any other language, literature, and culture of an ancient civilization emphasized in instruction which is not listed under classical languages above. (Specify.)
	Selected Emphases:
06.01 00 01 00	CULTURE
06.01 00 02 00	LISTENING COMPREHENSION
06.01 00 03 00	READING
06.01 00 04 00	SPEAKING
06.01 00 05 00	STUDY OF LITERATURE
06.01 00 06 00	TRANSLATION
06.01 00 07 00	WRITING
06.01 00 99 00	OTHER SELECTED EMPHASES—Include here other skills, knowledge, and understanding not included above. (Specify.)
06.02 00 00 00	**MODERN FOREIGN LANGUAGES*** The study of the language, literature, and culture of a selected segment of the population of the modern world. Selected emphases in instruction in any of the modern foreign languages may be identified in the list of items following 06.02 99 00 00. An example might be: language taught, 06.02 06 00 00 *Danish*; emphases in instruction, 06.02 06 01 00 *Culture* and 06.02 06 02 00 *Listening Comprehension.*
06.02 01 00 00	**Arabic, Modern Standard**—The language, literature, and culture of the Arabic-speaking peoples of the modern world. Mod-

---

* See footnote, *General Language*, chapter 5, p. 122.

	ern Standard Arabic, based on classical Arabic, is the most commonly taught and used language as a vehicle of communication among the various Arabic-speaking peoples.
06.02 02 00 00	**Arabic, colloquial**—The spoken regional language and culture of a given segment of the Arabic-speaking world. (The dialect should be specified.)
06.02 03 00 00	**Chinese, modern Mandarin**—The official oral language of the Chinese-speaking people of the modern world. The study of modern Mandarin may include literature and culture.
06.02 04 00 00	**Chinese, Cantonese**—The spoken language and culture of the Cantonese-speaking people.
06.02 05 00 00	**Czech**—The language, literature, and culture of the Czech-speaking people.
06.02 06 00 00	**Danish**—The language, literature, and culture of the Danish-speaking people.
06.02 07 00 00	**English as a foreign language**—The study of the language, literature, and culture of the English-speaking peoples by individuals whose mother tongue is not English.
06.02 08 00 00	**French**—The language, literature, and culture of the French-speaking people.
06.02 09 00 00	**German**—The language, literature, and culture of the German-speaking people.
06.02 10 00 00	**Greek, modern**—The language, literature, and culture of the Greek-speaking people of the modern world.
06.02 11 00 00	**Hawaiian**—The language, literature, and culture of the Hawaiian-speaking people.
06.02 12 00 00	**Hebrew, modern (Israeli)**—The language, literature, and culture of the Hebrew-speaking people of the modern world. This is the official language of Israel.
06.02 13 00 00	**Italian**—The language, literature, and culture of the Italian-speaking people.
06.02 14 00 00	**Japanese**—The language, literature, and culture of the Japanese-speaking people.
06.02 15 00 00	**Norwegian**—The language, literature, and culture of the Norwegian-speaking people.
06.02 16 00 00	**Polish**—The language, literature, and culture of the Polish-speaking people.
06.02 17 00 00	**Portuguese**—The language, literature, and culture of the Portuguese-speaking people.
06.02 18 00 00	**Russian**—The language, literature, and culture of the Russian-speaking people. Other languages spoken within the U.S.S.R.—such as Georgian, Ukranian, and Uzbec—should be recorded under the item, *Other Modern Foreign* Languages.*
06.02 19 00 00	**Spanish**—The language, literature, and culture of the Spanish-speaking peoples.
06.02 20 00 00	**Swedish**—The language, literature, and culture of the Swedish-speaking people.
06.02 99 00 00	**Other Modern Foreign Languages***—Include here any other language, literature, and culture of a selected segment of the modern world emphasized in instruction which is not listed under modern foreign languages above. (Specify.)
	Selected Emphases:
06.02 00 01 00	CULTURE
06.02 00 02 00	LISTENING COMPREHENSION
06.02 00 03 00	READING
06.02 00 04 00	SPEAKING
06.02 00 05 00	STUDY OF LITERATURE
06.02 00 06 00	TRANSLATION
06.02 00 07 00	WRITING
06.02 00 99 00	OTHER SELECTED EMPHASES—Include here other skills, knowledge, and understanding not included above. (Specify.)
06.03 00 00 00	**HUMANITIES** The study of a group of subjects such as classical and modern languages, art, music, literature, religion, history, and philosophy—with foreign languages usually forming the core—concerned with man's individual cultural achievements in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately; in other instances these aspects of subject matter are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART; 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS; 12.06 00 00 00 *Humanities* under MUSIC; and 05.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

HEALTH OCCUPATIONS EDUCATION

07.00 00 00 00

Education for health occupations comprises the body of related subject matter, or the body of related courses, and planned experiences designed to impart knowledge and develop understanding and skills required to support the health professions. Instruction is organized to prepare pupils for occupational objectives concerned with assisting qualified personnel in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to people, including understanding and skills essential to provide care and health services to patients.

Education for health workers usually is conducted by recognized education agencies and appropriate health institutions and services that can make available the quality and kind of experiences needed by the trainee in developing the competencies required for his occupational goal.

Instructional programs which prepare persons for occupations that render health services directly to patients provide planned instruction and experience in appropriate clinical situations. For occupations that render health services which do not involve direct services to patients, planned instruction and experience in laboratories and/or appropriate work situations are provided as an integral part of the instructional program.

Licensure, Certification, and Registration

Techniques for the regulation of workers in health occupations have been developed and administered, either by appropriate professional organizations or by legally constituted authority in the respective States, as a means to safeguarding, the public against unqualified and/or unscrupulous persons. Therefore, regulatory procedures such as

---

* See footnote, *General Language*, chapter 5, p. 122.

07 HEALTH OCCUPATIONS EDUCATION—Continued

licensure, certification, and/or registration in certain of the health occupations have been established.

> *Licensure*—Under the authority of a State, laws are enacted setting forth the minimum qualifications for persons and the standards to be met for practicing in an occupation. All physicians, nurses, dental hygienists, and a growing number of paramedical personnel must be licensed in their respective fields. Organizations representing these groups have sought and helped to establish State laws for licensing practitioners in their fields. They have also found that mandatory regulation of these occupations under State licensure laws best serves the public interest. Employers, too, have come to rely upon the legal licensing agency for assurance that a practitioner is qualified in his field.
>
> *Certification*—Professional societies endeavor to improve the quality of services provided by supportive personnel in health fields through voluntary certification of individual workers. Standards pertaining to education, experience, and personal qualifications are determined by the professional society, usually in cooperation with the auxiliary group that is subject to the certification procedure. Applicants wishing to become certified under these standards must make application to the certifying board of the association and comply with the certification of standards.
>
> *Registration*—The term registration is used by certain occupational groups interchangeably with either the term licensure or certification. "Registered" nurse connotes a nurse who is licensed to practice as a professional nurse or as a technical-level nurse. A "registered" medical librarian is certified by and registered with her professional association. Registration may be interpreted in specific instances by placing after it (L) when "licensure" applies, or (C) when "certification" applies.
>
> NOTE: In situations involving designation of "licensure," "certification," or "registration" for record and/or report purposes as applicable to selected items in this subject-matter area, the following symbols may be used: (L) for Licensure; (C) for Certification; and (R) for Registration.

The Ad Hoc Committee for Health Occupations Education applied the following rationale to the selection of substantive content for placement in the Health Occupations Education area: (1) the items selected and classified were determined by consensus of the committee to be representative of the subject matter most commonly taught in health occupations education in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter selected for placement under Health Occupations Education could be defined in brief form using only salient descriptive elements.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series.—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series.—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under the heading, Health Occupations Education, are items of information which describe selected aspects of education for health occupations. In the following definitions the term "subject matter" includes theory that may be given either in a school or in a clinical setting, and the term "experiences" includes the applied subject matter which is provided in a clinical setting.

07.01 00 00 00	**DENTAL** Included in this category are occupations concerned with supportive services to the dental profession.
07.01 01 00 00	**Dental Assisting**—A combination of subject matter and experiences designed to prepare a person to assist the dentist at the chairside in the dental operatory, to perform reception and clerical functions, and to carry out selected dental laboratory work.
07.01 02 00 00	**Dental Hygiene (Associate Degree)**—A combination of subject matter and experiences designed to prepare a person to provide services to patients such as performing complete oral prophylaxis, applying medication, and providing dental health education services, both for chair-side patients and in community health programs, under the supervision of the dentist. (Included as 16.03 01 00 00 *Dental Hygiene* (*Associate Degree*) under TECHNICAL EDUCATION)
07.01 03 00 00	**Dental Laboratory Technology**—A combination of subject matter and experiences designed to prepare a person to execute the work in producing restorative appliances required for the oral health of the patient as authorized by the dentist.
07.01 99 00 00	**Other Dental**—Include here other organized subject matter and experiences emphasized in occupations, not listed above, which are concerned with supportive services to the dental profession. (Specify.)
07.02 00 00 00	**MEDICAL LABORATORY TECHNOLOGY** Planned subject matter and laboratory experiences concerned with bacteriological, biological, and chemical tests to provide data for use in diagnosis and treatment of diseases—using microscopes, micrometers, and other instruments. Persons prepared in this area usually work under the supervision of medical technologists, clinical pathologists, or physicians.
07.02 01 00 00	**Cytology (Cytotechnology)**—A combination of subject matter and experiences designed to prepare a person to stain and screen smeared slides for determination of abnormalities of exfoliated cells that may

07 HEALTH OCCUPATIONS EDUCATION—Continued

	sist in the diagnosis of cancer. This work is performed under the supervision of a physician.
07.02 02 00 00	**Histology**—A combination of subject matter and experiences designed for teaching a person to prepare, section, and stain tissues for microscopic study under the direction of a clinical pathologist.
07.02 03 00 00	**Medical Laboratory Assisting**—A combination of subject matter and experiences organized to prepare a person to work under the supervision of medical technologists, clinical pathologists, or physicians to perform routine clinical laboratory procedures. (Included as 16.03 03 00 00 *Medical Laboratory Assisting* under TECHNICAL EDUCATION)
07.02 04 00 00	**Hematology**—A combination of subject matter and experiences organized to prepare a person to collect blood and perform complete blood counts; prepare and stain blood smears; perform hemoglobin determinations; carry out tests to determine bleeding time, coagulation time, sedimentation rate, and prothrombin time; and to determine relative amounts of plasma and corpuscles.
07.02 99 00 00	**Other Medical Laboratory Technology**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with medical laboratory technology. (Specify.)
07.03 00 00 00	**NURSING** A combination of subject matter and clinical experiences designed to prepare a person to provide nursing care to patients in hospitals, sanitariums, clinics, or other institutions by administering medications and treatments, assisting the physician during treatment and examination of patients, or performing related auxiliary services.
07.03 01 00 00	**Nursing (Associate Degree)**—A combination of general and nursing education and clinical experiences designed to prepare a person for general-duty nursing under the nurse supervisor or physician, or with other members of the health team. (Included as 16.03 05 00 00 *Nursing (Associate Degree)* under TECHNICAL EDUCATION)
07.03 02 00 00	**Practical (Vocational) Nurse**—A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a nurse or physician.
07.03 03 00 00	**Nursing Assistance (Aide)**—A combination of subject matter and experiences which prepares a person to perform simple tasks involved in the personal care of individuals receiving nursing services. These tasks are performed under the supervision of a nurse.
07.03 04 00 00	**Psychiatric Aide**—A combination of subject matter and experiences designed to prepare a person to care for mentally ill patients in a psychiatric medical care facility under direction of nursing and medical staff. Included is instruction in patient hygiene and grooming, feeding, obtaining laboratory specimens, observing patients for unusual behavior, methods of aiding in restraining patients to prevent injury to themselves or others, and encouraging participation in social and recreational activities.
07.03 05 00 00	**Surgical Technician (Operating Room Technician)**—A combination of subject matter and experiences designed to prepare a person to serve as a general technical assistant on the surgical team in the operating suite.
07.03 06 00 00	**Obstetrical Technician**—A combination of subject matter and experiences designed to prepare a person to assist in the care of mothers in labor and delivery rooms before, during, and after delivery under the supervision of professional personnel.
07.03 07 00 00	**Home Health Aide**—A combination of subject matter and experiences designed to prepare a person to assist the elderly, convalescent, or handicapped in their homes and to provide for their daily living needs which may be described as physical, mental, emotional, social, and spiritual.
07.03 08 00 00	**School Health Aide**—A combination of subject matter and experiences designed to prepare a person to assist the physician or nurse with physical examinations, health education, and the conduct of ongoing programs for improving or maintaining students' health.
07.03 99 00 00	**Other Nursing**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with nursing. (Specify.)
07.04 00 00 00	**REHABILITATION** A combination of subject matter and experiences designed to prepare a person to work under the direction of a physician and the supervision of other appropriate specialists in assisting handicapped persons to overcome or compensate for any loss of function, and to restore the individual's physical and/or mental health to an optimum level.
07.04 01 00 00	**Occupational Therapy**—A combination of subject matter and experiences designed to prepare a person to assist the professional occupational therapist in implementing the plan of therapy for a patient as prescribed by a physician.
07.04 02 00 00	**Physical Therapy**—A combination of subject matter and experiences designed to prepare a person to assist the professional physical therapist in implementing the plan of therapy for a patient as prescribed by a physician.
07.04 03 00 00	**Prosthetics**—A combination of subject matter and experiences designed to prepare a person to write specifications for and to make and fit artificial limbs, following the prescription of a qualified medical practitioner. Instruction includes the study of anatomy, biomechanics, engineering as related to prosthetic appliances, and shop experience in prosthetic construction.
07.04 04 00 00	**Orthotics**—A combination of subject matter and experiences designed to prepare a person to write specifications for and to make and fit braces and appliances for body deformities and disorders, following the prescription of a qualified medical practitioner. Instruction includes the study of anatomy, biomechanics, engineering as related to orthotic appliances, and shop experience in orthotic construction.
07.04 99 00 00	**Other Rehabilitation**—Include here other organized subject matter and experiences

07 HEALTH OCCUPATIONS EDUCATION—Continued

emphasized in occupations, not listed or classifiable above, which are concerned with rehabilitation. (Specify.)

07.05 00 00 00 RADIOLOGIC

A combination of subject matter and experiences designed to prepare a person to apply roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes. Instruction may include the study of anatomy, physiology, radiation physics, radiographic techniques, chemistry of processing and darkroom technique, radiation protection, and equipment maintenance.

07.05 01 00 00 **Radiologic Technology (X-ray)**—A combination of subject matter and experiences designed to prepare a person for the safe use of X-ray equipment in clinical settings under the supervision of a radiologist or other physician. (Included as 16.03 04 00 00 *Radiologic Technology (X-ray)* under TECHNICAL EDUCATION)

07.05 02 00 00 **Radiation Therapy**—A combination of subject matter and experiences designed to prepare a person to use radiation producing devices to administer therapeutic treatments as prescribed by a radiologist.

07.05 03 00 00 **Nuclear Medical Technology**—A combination of subject matter and experiences designed to enable a person, working under a qualified physician, to prepare, administer, and measure radioactive isotopes in therapeutic, diagnostic, and tracer studies, utilizing and maintaining safe storage and handling of a variety of radioisotope equipment.

07.05 99 00 00 **Other Radiologic**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with radiologic. (Specify.)

07.06 00 00 00 OPHTHALMIC

A combination of subject matter and experiences designed to prepare a person, working under the supervision of an ophthalmologist or optometrist, to perform tests, administer treatment preliminary to examination or surgery, prepare and fit eyeglasses or contact lenses, and direct corrective eye exercises.

07.06 01 00 00 **Ophthalmic Dispensing**—A combination of subject matter and experiences designed to train a person to prepare, assemble, and fit corrective lenses as prescribed by a physician or optometrist.

07.06 02 00 00 **Orthoptics**—A combination of subject matter and experiences designed to prepare a person, working under the supervision of an ophthalmologist, to teach others with correctable focusing defects to develop and use binocular vision (focusing of both eyes).

07.06 03 00 00 **Optometrist Assistant**—A combination of subject matter and experiences designed to prepare a person to assist an optometrist in making tests to determine defects in vision, preparing and fitting eyeglasses or contact lenses, administering corrective eye exercises, or other treatment that does not require drugs or surgery.

07.06 99 00 00 **Other Ophthalmic**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with ophthalmic. (Specify.)

07.07 00 00 00 ENVIRONMENTAL HEALTH

A combination of subject matter and experiences designed to prepare a person, working under the supervision of a specialist, to recognize and evaluate environmental hazards such as radiation, fungi, air pollution, waste and sewage, noise, vibration, and poor lighting, and to prescribe methods of eliminating or controlling them.

07.07 01 00 00 **Environmental Health Assistant**—A combination of subject matter and experiences designed to prepare a person to assist sanitary engineers, scientists, physicians, and veterinarians to gather data on, inspect, and evaluate facilities and industries concerned with the public, such as water supply, the food industry (processing, distribution, and service), and sewage disposal facilities and plants.

07.07 02 00 00 **Radiological Health Technician**—A combination of subject matter and experiences designed to prepare a person to conduct radiological evaluations of exposure to X-ray, gamma, and alpha emitters and to recommend measures to insure maximum protection.

07.07 03 00 00 **Sanitarian Assistant**—A combination of subject matter and experiences designed to prepare a person, under supervision of a professional sanitarian, to investigate public and private establishments to determine compliance with or violation of public sanitation laws and regulations. These persons take samples of such materials as water, food, and air, and perform contamination tests.

07.07 99 00 00 **Other Environmental Health**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with environmental health. (Specify.)

07.08 00 00 00 MENTAL HEALTH TECHNOLOGY

A combination of subject matter and experiences designed to prepare a person to assist professionals in the mental health services.

07.08 01 00 00 **Mental Health Technician**—A combination of subject matter and experiences designed to prepare a person to assist nursing and medical personnel in rehabilitating mentally ill patients through recreational and occupational activities, training in new patterns of living, physical care of patients, and giving prescribed medication.

07.08 02 00 00 **Mental Retardation Aide**—A combination of subject matter and experiences designed to prepare a person to attend to the physical needs and well-being of mentally retarded patients and to aid in teaching and recreation processes under the supervision of professional staff members.

07.08 99 00 00 **Other Mental Health Technology**—Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with mental health technology. (Specify.)

07.09 00 00 00 MISCELLANEOUS HEALTH OCCUPATIONS EDUCATION

Include here other health occupations education programs not elsewhere classified which prepare a person to provide specified medical and health services.

07.09 01 00 00 **Electroencephalograph Technician**—A combination of subject matter and experi-

07 HEALTH OCCUPATIONS EDUCATION—Continued

ences designed to prepare a person to operate electrical equipment which records brain waves on a graph to be used by a medical practioner in diagnosing brain disorders. Instruction in minor repairs and maintenance of equipment may be included. (Included as 16.03 02 00 00 *Electroencephalograph Technician* under TECHNICAL EDUCATION)

07.09 02 00 00 **Electrocardiograph Technician**—A combination of subject matter and experiences designed to prepare a person to operate an electrocardiograph machine, recording electromotive variations in the action of heart muscle, and to provide data for diagnosis and treatment of heart ailments by a physician. Instruction in minor repairs and maintenance of equipment may be included.

07.09 03 00 00 **Inhalation Therapy**—Preparation includes a combination of subject matter and experiences designed to prepare a person to perform procedures and operate and maintain equipment used in supporting respiratory functions, including the administration of oxygen and other sustaining gases, as directed by a physician.

07.09 04 00 00 **Medical Assistant (Assistant in physician's office)**—A combination of subject matter and experiences designed to prepare a person to perform functions and follow procedures concerned with diagnosis and treatment of patients in a physician's office. Instruction includes physical examinations, laboratory tests, X-rays, measurements, and medications.

07.09 05 00 00 **Central Supply Technician**—A combination of subject matter and experiences designed to prepare a person to adjust, clean, sterilize, and assemble hospital equipment, supplies, and instruments according to prescribed procedures and techniques. Also included in instruction are inspection, evaluation and recommendation for purchase of equipment and materials, and distribution and inventory.

07.09 06 00 00 **Community Health Aide**—A combination of subject matter and experiences designed to prepare a person to serve as liaison between professional health workers and the recipients of health services. Instruction emphasizes basic understanding of biology, communicable diseases, environmental health, personal hygiene, infants, medicines, and family and community resources.

07.09 07 00 00 **Medical Emergency Technician**—A combination of subject matter and experiences designed to prepare technicians to become members of the health team, responsible to professional members, qualified to (a) respond to medical emergency calls, (b) evaluate the nature of the emergencies, (c) take appropriate prompt action to reduce the medical hazards to the receiving station, and (d) serve as technical assistant to the emergency-room staff of general hospitals.

07.09 08 00 00 **Food Service Supervisor**—A combination of subject matter and experiences designed to prepare a person to understand the nature of nutritional diseases and the importance of controlled diets in the treatment of patients with such diseases in a hospital or other health institution under the supervision of a dietitian. Instruction includes inspection of special diet trays and evaluation of patients' responses to diets.

07.09 09 00 00 **Mortuary Science**—A combination of subject matter and experiences designed to prepare a person to perform the sanitary and embalming preparations for interment in conformity with legal requirements.

07.09 10 00 00 **Orthopedic Assisting**—A combination of subject matter and experiences designed to prepare a person to assist an orthopedic specialist in preserving, restoring, and developing the form and function of the extremities, spine, and associated structures by medical, surgical, and physical methods.

07.99 00 00 00 **OTHER HEALTH OCCUPATIONS EDUCATION**

Include here other subject matter and experiences emphasized in health occupations education which are not listed or classifiable above. (Specify.)

HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION

08.00 00 00 00

The body of related subject matter and activities in health and safety in daily living, physical education, and recreation are organized for carrying on learning experiences concerned with developing (1) knowledge, attitudes, appreciations, and conduct essential to individual and group health; (2) awareness of, concern for, and knowledge, skills, and judgment necessary for practicing and promoting personal and public safety in the home, at school, on the job, and in traffic; and (3) physical and mental growth and fitness by means of activities designed to improve the muscles, motor skills, and attitudes and habits of conduct of individuals and groups.

The Ad Hoc Committee for Health and Safety in Daily Living, Physical Education, and Recreation applied the following rationale to the selection of items for placement in the Health and Safety in Daily Living, Physical Education, and Recreation area: (1) the items were determined by consensus of the committee to be especially appropriate to health and safety in daily living, physical education, and recreation; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items were identifiable by titles which the *ad hoc* committee considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of health and safety in daily living, physical education and recreation as an integral part of the instructional program. As an example, the Girls' Athletic Association provides additional opportunities to develop leadership, citizenship, and other qualities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION—Continued

page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Girls' Athletic Association is identified for reporting purposes and further described under Cocurricular Activities as Item 20.02 11 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the item sclassified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are the items of information which identify various aspects of subject matter and learning activities in health, safety in daily living, physical education, and recreation.

08.01 00 00 00 HEALTH

Learning activities which utilize experiences for influencing understanding, attitudes, and practices relating to individual, family, and community health. Instruction is based on scientific facts and truths which serve as a foundation for decisionmaking and action to achieve health potentials.

08.01 01 00 00 **Community Health**—The study of (1) the availability and accessibility of public, private, and voluntary health services and facilities; (2) the functions and services of local, State, and Federal health agencies, including public, voluntary, and professional; and (3) prevailing health conditions in the community.

08.01 02 00 00 **Consumer Health**—Learning experiences designed to help pupils develop the ability to make sound decisions in the selection and utilization of health services, the selection of health and accident insurance, and the purchase of health products. Emphasis is also on developing knowledge essential for recognizing quackery and false advertising in relation to foods, drugs, and mechanical devices.

08.01 03 00 00 **Disease Prevention and Control: Communicable and Chronic**—The study of the cause, control, and prevention of disorders which impair health, with emphasis on prevention. The various diseases are usually categorized under two headings—"communicable" and "chronic." The former includes diseases which can be transferred from one person to another, such as tuberculosis, venereal diseases, and measles; the latter includes diseases such as cancer, heart disease, multiple sclerosis, and cerebral palsy.

08.01 04 00 00 **Environmental Health**—Learning experiences designed to help the pupil understand the effect upon man's health and well-being of such environmental factors as water supply, pollution control, food contamination, air pollution, radiation exposure, crowdedness, noise, and mobility.

08.01 05 00 00 **Family Life Education (including Sex Education)**—The study of the family as an entity and as a unit in the community; the physical, psychological, sociological, and emotional aspects of growth toward maturity; and the biology of reproduction.

08.01 06 00 00 **First Aid**—Learning experiences designed to (1) develop understanding and skills necessary, in time of emergency, to prevent the death or further injury of a person until the services of a physician can be obtained, and (2) provide instruction concerning the national program of medical self-help.

08.01 07 00 00 **Growth and Development**—The study and development of understanding concerning the physical, mental, emotional, and social changes which occur in human development from conception through adulthood. Included are such areas as body structure and function, heredity, environmental influences, and differences and likenesses among people.

08.01 08 00 00 **Harmful Substances**—The study of the effects of the misuse of alcohol and the use of tobacco, narcotics, dangerous drugs, volatile chemicals, tranquilizers, and similar products on individuals, families, and communities. Also included and emphasized is information on poisons, poisonous plants, and poison control centers.

08.01 09 00 00 **Health Careers**—The exploration and study of professional, semiprofessional, technical, and allied occupational opportunities which contribute directly to the health and well being of people. Areas emphasized for exploration include medicine, dentistry, nursing, dental hygiene, research technology, laboratory technologies, dietetics, nurses' aides, and supporting services.

08.01 10 00 00 **Health Maintenance and Care**—Organized learning experiences directed toward helping the individual to assume responsibility for attaining optimum personal health through giving attention to such factors as the development and maintenance of personal fitness (physical fitness); a balance in exercise, work, sleep and rest, relaxation and recreation; and body care and grooming.

08.01 10 01 00 Foods and Nutrition—(For definition see 09.01 07 00 00 *Foods and Nutrition* under HOME ECONOMICS.)

08.01 10 02 00 Dental Health—Learning experiences designed to develop knowledge and understanding concerning the growth and structure of the teeth, causes and prevention of tooth decay and other dental diseases, and sound practices in the care of the teeth and gums (mouth).

08.01 10 03 00 Physical Fitness: exercise, work, sleep, rest, relaxation, and recreation—Learning experiences designed to help pupils develop understanding and desirable attitudes regarding the relationship between vigorous exercise and health and the need for balance among exercise, rest, sleep, relaxation, work, and recreation.

08.01 10 04 00 Personal Grooming and Body Care—Learning experiences designed to develop in the pupil good practices in grooming, dress, cleanliness and body care, e.g., face, ears, and eyes.

08.01 10 05 00 Mental Health—Experiences and conditions directed toward helping the pupil develop the ability to adapt to his environment, to perceive reality accurately, to manage stress healthfully, to stand on his own two feet, and to learn and to develop a feeling of well-being.

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued

08.01 10 99 00 OTHER HEALTH MAINTENANCE AND CARE—Include here other organized subject matter and experiences emphasized in health maintenance and care which are not listed above. (Specify.)

08.01 11 00 00 **International Health**—An organization of subject matter concerned with the cooperation between two or more nations for (1) the prevention and control of disease, and (2) the improvement of personal and community health—both aimed toward accelerating social and economic development.

08.01 99 00 00 **Other Health**—Include here other organized subject matter and experiences emphasized in health education which are not listed or classifiable above. (Specify.)

08.02 00 00 00 **SAFETY IN DAILY LIVING**

Subject matter and learning experiences concerned with developing in individuals (1) an awareness and understanding of hazards of every day living, and (2) the knowledge, habits, attitudes, and skills which will enable them to function at optimum level in the presence of hazards.

08.02 01 00 00 **Explosives**—(For definition see 21.02 02 00 00 *Explosives* under SAFETY AND DRIVER EDUCATION.)

08.02 02 00 00 **Firearms**—The study of the proper use of firearms, including knowledge of the gun and its working mechanism, its use in hunting, trap and skeet shooting, marksmanship, and legal requirements related to firearms.

08.02 03 00 00 **Fire Safety**—The study of fire safety emphasizing subject matter and learning experiences designed to develop desirable attitudes regarding fire prevention and fire waste, and help pupils understand the hazards and benefits of fire, including causes and preventive measures. Consideration is given to various common hazards such as smoking, matches, electricity, heating units, explosive materials, rubbish, outdoor fires, lightning, construction defects, and procedures to be followed in case of fire, e.g., escape plans and fighting fires.

08.02 04 00 00 **Holiday and Vacation Safety**—A familiarization with and study of hazards as they apply to Halloween, including costumes, tricks and treating, and traffic safety; Christmas, including hazards of shopping, decorating, preparing a safe Christmas tree, and electrical equipment. Other holidays often given attention are Memorial Day (parades, traffic); Fourth of July (fireworks and explosives); Labor Day, Veteran's Day, New Year's Day (drinking and driving); Easter; Yom Kippur (use of candelabra in fire-safe place); Thanksgiving; and Arbor Day (proper and safe use of garden tools).

A study of vacation safety is emphasized, including constant changing of the environment necessitating more self-responsibility due to less supervision than at other times. Frequently considered are playgrounds, parks and camping areas, public places (stores, churches, libraries, theatres), public transportation, excursions, general recreational areas (picnicking, hiking), fishing, bathing and swimming, canoeing, sunburn and exposure, and traffic safety.

08.02 05 00 00 **Personal Responsibility in Unsupervised Activities**—Learning experiences designed to develop in pupils self-responsibility and responsibility for others as they participate in unsupervised activities. Consideration is usually given to the following areas: (1) safe play sites, (2) sportsmanlike conduct, (3) respect for property, (4) places to avoid, (5) strangers, and (6) what to do in case of an accident, (Included as 21.02 04 00 00 *Personal Responsibility in Unsupervised Activities* under SAFETY AND DRIVER EDUCATION)

08.02 06 00 00 **Safety in the Home**—Learning experiences and activities designed to help pupils understand the hazards in and around the home including falls, burns, gas poisoning, poisons, mechanical suffocation, firearms, home workshops, garden tools, and power mowers; electrical fixtures and appliances; treatment of cuts, scratches, and bruises; animals; and engaging a baby sitter. (Included as 21.02 05 00 00 *Safety in the Home* under SAFETY AND DRIVER EDUCATION)

08.02 07 00 00 **Safety in Physical Education and Recreation**—Learning experiences and activities designed to develop in pupils an understanding of the hazards in physical education (including sports) and recreational activities; acceptance of responsibility for their own safety and that of fellow participants; and essential knowledge, skills, habits, and attitudes for safe participation. These learning experiences are emphasized as an integral part of instruction in *physical education* and *recreation*.

08.02 08 00 00 **School Safety**—A study of safety in and around the school—on playgrounds, and in halls and stairs, classrooms, and washrooms. Also emphasized in instruction are the responsibilities of the administration, teachers, pupils, custodians, and parents. (Included as 21.02 06 00 00 *School Safety* under SAFETY AND DRIVER EDUCATION)

08.02 09 00 00 **Traffic Safety**—(For definition see 21.02 07 00 00 *Traffic Safety* under SAFETY AND DRIVER EDUCATION.)

08.02 09 01 00 BICYCLE, MOTOR BIKE, OTHER—(For definition see 21.02 07 01 00 *Bicycle, Motor Bike, other* under SAFETY AND DRIVER EDUCATION.)

08.02 09 02 00 PASSENGER—(For definition see 21.02 07 02 00 *Passenger* under SAFETY AND DRIVER EDUCATION.)

08.02 09 03 00 PEDESTRIAN—(For definition see 21.02 07 03 00 *Pedestrian* under SAFETY AND DRIVER EDUCATION.)

08.02 09 04 00 STUDENT PATROL—(For definition see 21.02 07 04 00 *Student Patrol* under DRIVER AND SAFETY EDUCATION.)

08.02 09 99 00 OTHER TRAFFIC SAFETY—Include here other organized subject matter and experiences emphasized in traffic safety which are not listed above or in the category 21.02 07 00 00 *Traffic Safety* under SAFETY AND DRIVER EDUCATION. (Specify.)

08.02 10 00 00 **Vocational and Occupational Safety**—Learning experiences concerned with unsafe working areas and conditions and unsafe personal conduct, including causes and effects. Safety practices are emphasized as related to a wide range of situations, e.g., the handling and storing of a variety of objects,

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued

	machine operations, use of tools, the environment, fire prevention and protection, on-the-job instruction, accident reporting, rules, and off-the-job accidents. (Included as 21.02 08 00 00 *Vocational and Occupational Safety* under SAFETY AND DRIVER EDUCATION)
08.02 11 00 00	**Water Safety**—Learning experiences and activities designed to provide instruction emphasizing safety in swimming, diving, water sports, skin and scuba diving, handling of small crafts, skiing, surfacing, health precautions, and rescue skills.
08.02 99 00 00	**Other Safety in Daily Living**—Include here other organized subject matter and experiences emphasized in safety in daily living which are not listed above. (Specify.)
08.03 00 00 00	**PHYSICAL EDUCATION** Organized, sequential, and systematic application of the concepts and principles of the art and science of human movement through the teaching–learning medium of physical activities. The types of planned movement experiences are organized under various descriptive titles such as Adapted Physical Education; Aquatics; Body Dynamics; Dance, Rhythms, and Dramatic Activities; Group Games, Contests, and Relays; Individual and Dual Sports; Outdoor Recreational Activities; Stunts, Tumbling, and Gymnastics; and Team Sports. With movement as its central focus, physical education is directed primarily to: a. The pupil's ability and capability to move; b. The use he makes of his movement ability for essential purposes such as survival, health maintenance and improvement, fitness, education for leisure, communication, and expression; and c. The relationship of his movement to his physical and social environment and to other aspects of his total growth and development. In the area of physical education several classified items are not defined because of their obvious and well-understood meaning, e.g., Baseball, Basketball, Football, Water Games, and Folk Dance.
08.03 01 00 00	**Adapted Physical Education**—Planned, diversified, and highly personalized physical activities suited to the special needs of pupils having atypical physical, mental, and/or behavioral conditions of temporary or enduring nature, and who may not safely or successfully participate unrestrictedly in the vigorous activities of the regular instructional program of physical education. Instruction provides for *corrective* and *remedial* physical education and *recreational adaptations* as needed.
08.03 02 00 00	**Aquatics**—Organized activities, in or on the water, designed to provide opportunities for pupils to experience activities such as swimming, diving, lifesaving, synchronized swimming, water games, handling small crafts, skin and scuba diving, waterskiing, and surfing. (The following items are not defined because of their being commonly understood.)
08.03 02 01 00	DIVING
08.03 02 02 00	LIFESAVING
08.03 02 03 00	SKIN AND SCUBA DIVING
08.03 02 04 00	SMALL CRAFTS
08.03 02 05 00	SURFING
08.03 02 06 00	SWIMMING
08.03 02 07 00	SYNCHRONIZED SWIMMING
08.03 02 08 00	WATER GAMES
08.03 02 09 00	WATER SKIING
08.03 02 99 00	OTHER AQUATICS—Include here other organized subject matter and experiences emphasized in aquatics which are not listed above. (Specify.)
08.03 03 00 00	**Body Dynamics**—Planned physical activities based primarily on the pupil's special needs and desires for self-discovery, self-evaluation, self-direction, and self-management in maintaining, motivating, and improving his general level of total fitness and achievement of better performance in special tasks and in daily living. These activities include Conditioning Exercises, Fundamental Movements, Individual Self-testing Events, and Posture Education.
08.03 03 01 00	CONDITIONING EXERCISES—Activities involving invented, nonplayful, systematic movements—individually or teacher-directed — designed specifically to strengthen muscle groups, prepare the body for more strenuous effort, or improve efficiency of performance and appearance. Specific kinds of movement experiences include calisthenics or free exercises, weight training, and exercises with specialized equipment or apparatus.
08.03 03 02 00	FUNDAMENTAL MOVEMENTS—Planned experiences involving a series of basic, natural movements, common to all physical activities such as creeping, crawling, walking, running, hopping, skipping, leaping, jumping, throwing, and climbing.
08.03 03 03 00	INDIVIDUAL SELF-TESTING EVENTS—Physical activities concerned with measurable and scorable events, based on the pupil's desire to test his own physical abilities in the elements or specific skills of sports and games, e.g., the football throw and kick for distance and accuracy, the baseball throw for strikes and distance, baskets per minute with the basketball, and the volleyball serve for accuracy.
08.03 03 04 00	POSTURE EDUCATION—The study of the mechanics of the body and the most efficient and esthetic patterns of body alignment and performance in a variety of daily activities, including the relationship of balance, strength, flexibility, agility, and proper clothing and environmental factors to efficient postures in physical activity, work, rest, and relaxation.
08.03 03 99 00	OTHER BODY DYNAMICS—Include here other organized subject matter and experiences emphasized in body dynamics not listed above. (Specify.)
08.03 04 00 00	**Dance, Rhythms, and Dramatic Activities**—Activities which are imitative or creative expressions of movement designed to communicate ideas and feelings. A wide variety of rhythmic, space, and movement patterns are involved, including:
08.03 04 01 00	DANCE (PHYSICAL EDUCATION)—Organized activity performed by pupils, alone or with others, in patterns of sequential movements in rhythm, usually accompanied by music. Various types of dances

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued

are organized under such descriptive titles as folk, square, modern, and social.

08.03 04 01 01	*Folk Dance*
08.03 04 01 02	*Modern Dance*
08.03 04 01 03	*Social Dance*
08.03 04 01 04	*Square Dance*
08.03 04 02 00	RHYTHMS—Organized activities, usually comprised of singing games and the performance of the fundamental movements in a variety of tempos and space patterns, with musical accompaniment.
08.03 04 03 00	DRAMATIC ACTIVITIES—Activities designed to be imitative or creative in nature with or without the use of music. Activities include folk festivals, free play, mimetics, pageantry, and story plays.
08.03 04 03 01	*Folk Festival*
08.03 04 03 02	*Free Play*
08.03 04 03 03	*Mimetics*
08.03 04 03 04	*Pageantry*
08.03 04 03 05	*Story Play*
08.03 04 03 99	*Other Dramatic Activities*—Include here other organized subject matter and experiences emphasized in dramatics which are not listed above. (Specify.)
08.03 05 00 00	**Group Games, Contests, and Relays**—Planned developmental activities which provide opportunities for physical interactions among pupils in either cooperative or competitive situations. The activities are developed on a progressive and sequential basis from the very simple to the complex, and include duck-in-the-pond, dodge ball, partner tag, chicken fight, Indian wrestling, tug-o-war, and various types of relays.
08.03 06 00 00	**Individual and Dual Sports**—Planned physical activities, with high carry-over possibilities for lifetime use, generally involving participation by one or two pupils competing against one or two pupils in the same activity according to predetermined rules. Such activities include the following, which are not defined here because of their obvious and well-understood meanings.
08.03 06 01 00	ARCHERY
08.03 06 02 00	BADMINTON
08.03 06 03 00	BOWLING
08.03 06 04 00	FENCING
08.03 06 05 00	GOLF
08.03 06 06 00	HANDBALL
08.03 06 07 00	TENNIS
08.03 06 08 00	TRACK AND FIELD
08.03 06 09 00	WRESTLING
08.03 06 99 00	OTHER INDIVIDUAL AND DUAL SPORTS—Include here other organized subject matter and experiences emphasized in individual and dual sports which are not listed above. (Specify.)
08.03 07 00 00	**Outdoor Recreational Activities**—Planned learning experiences which are usually organized as noncompetitive, voluntary, out-of-door diversions conducted in a natural setting, often away from the school environment. Among such activities are the following, which are not defined here because of their obvious and well-understood meanings.
08.03 07 01 00	CAMPING
08.03 07 02 00	CYCLING
08.03 07 03 00	FISHING
08.03 07 04 00	HUNTING
08.03 07 04 01	*Bow Hunting*
08.03 07 04 02	*Rifle Hunting*
08.03 07 04 03	*Shotgun Hunting*
08.03 07 04 99	*Other Hunting* (Specify.)
08.03 07 05 00	ICE SKATING
08.03 07 06 00	ORIENTEERING—Planned activities using a map for guidance and a compass for direction by means of which persons navigate cross-country from one point to another. Emphasis is on computing and adapting knowledge from an ordnance survey map to determine the shortest way between two points but choosing the quickest way around high cliffs and water regions.
08.03 07 07 00	RIDING
08.03 07 08 00	SKIN AND SCUBA DIVING
08.03 07 09 00	SMALL CRAFTS
08.03 07 09 01	*Boating*
08.03 07 09 02	*Canoeing*
08.03 07 09 03	*Rowing*
08.03 07 09 04	*Sailing*
08.03 07 09 99	*Other Small Crafts*—Include here other organized subject matter and experiences emphasized in small crafts which are not listed above. (Specify.)
08.03 07 10 00	SNOWSKIING
08.03 07 10 01	*Cross-country Skiing*
08.03 07 10 02	*Downhill Skiing*
08.03 07 10 03	*Jump Skiing*
08.03 07 11 00	SURFING
08.03 07 12 00	WATERSKIING
08.03 07 99 00	OTHER OUTDOOR RECREATIONAL ACTIVITIES—Include here other organized subject matter and experiences emphasized in outdoor recreational activities which are not listed above. (Specify.)
08.03 08 00 00	**Stunts, Tumbling, and Gymnastics**—A series of activities designed to provide the pupil an opportunity to perform formal movements in various combinations, and to create new movements while participating in activities such as balancing, building pyramids, performing novel antics and actions as an individual, with a partner, or in a group. Such activities involve vaulting over various apparatus and exercising on mats, parallel bars, a horizontal bar, rings, ropes, the side horse, or trampoline. Among the activities are the following, which are not defined here because of their obvious and well-understood meanings.
08.03 08 01 00	BALANCE BEAM
08.03 08 02 00	BUILDING PYRAMIDS
08.03 08 03 00	PARALLEL BARS
08.03 08 04 00	HORIZONTAL BARS
08.03 08 05 00	RINGS
08.03 08 06 00	ROPES
08.03 08 07 00	SIDE HORSE
08.03 08 08 00	TRAMPOLINE
08.03 08 99 00	OTHER STUNTS, TUMBLING, AND GYMNASTICS—Include here other organized subject matter and experiences emphasized in stunts, tumbling, and gymnastics which are not listed above. (Specify.)

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION—Continued

08.03 09 00 00	**Team Sports**—Planned physical activities involving relatively complex rules and strategy in which success is partially determined by the degree of group cooperation in competing successfully against comparable opponents in the same activity according to predetermined rules. Such learning experiences and activities include the following which are not defined here because of their obvious and well-understood meanings.
08.03 09 01 00	BASEBALL
08.03 09 02 00	BASKETBALL
08.03 09 03 00	CROSS COUNTRY
08.03 09 04 00	CURLING
08.03 09 05 00	FIELD HOCKEY
08.03 09 06 00	FOOTBALL
08.03 09 07 00	ICE HOCKEY
08.03 09 08 00	LACROSSE
08.03 09 09 00	SOCCER
08.03 09 10 00	SOFTBALL
08.03 09 11 00	SPEED-A-WAY
08.03 09 12 00	SPEEDBALL
08.03 09 13 00	VOLLEYBALL
08.03 09 14 00	WATER POLO
08.03 09 99 00	OTHER TEAM SPORTS—Include here other organized subject matter and experiences emphasized in team sports which are not listed above. (Specify.)
08.03 99 00 00	**Other Physical Education**—Include here other organized subject matter and experiences emphasized in physical education which are not classifiable or listed above. (Specify.)
08.04 00 00 00	**RECREATION** Subject matter and experiences organized as an integral part of both the planned instructional program and the cocurricular and recreational program. When these activities are taught in areas such as science, music, physical education, English language arts, or mathematics, they are part of the instructional program. When they are voluntary, school sponsored and supervised, and generally not for credit, they become part of the cocurricular and recreational activities program. The following recreational and cocurricular activities are frequently emphasized. (Outdoor Recreation, Performing Arts, Drama, Music, Physical Recreation, and Voluntary Service are not defined because of their obvious and well-understood meanings.)
08.04 01 00 00	**Arts and Crafts**—Instruction designed to provide pupils with opportunities for creative expression and communication in which one's hands are used to translate culture and personality into objects of reality for personal satisfaction, and to develop an appreciation for well-designed objects, e.g., sculpturing, weaving, pottery-making, whittling, metalworking, leathercraft, and clay modeling.
08.04 02 00 00	**Communicative Arts**—Reading, writing, speaking, and language activities which offer both personal enjoyment and creative experiences, e.g., the Great Books Program, reading for others, personal improvement reading, business and letter writing, creative and technical writing, poetry, public speaking, foreign language clubs, and discussion groups.
08.04 03 00 00	**Hobbies**—Recreation activities which are happily pursued with great interest over a sustained period of time. Although basically an individual pursuit, they can and often do lead to group and club participation. Hobbies are as varied as the field of human interest and experience but usually can be encompassed under four categories: collecting (coins, stamps, insects, autographs); creating (writing, home mechanics, gardening, painting, designing, photography); educational (astronomy, ornithology, mineralogy, horticulture); and performing (sports, music, hiking).
08.04 04 00 00	**Outdoor Recreation**
08.04 05 00 00	**Performing Arts**
08.04 05 01 00	DANCE—A form of expression through movement in response to rhythm. Through a variety of forms it is planned to provide pleasure and satisfaction as a social and creative activity, e.g., folk, square, social, modern, mixers, creative rhythms, tap, clog, and ballet. It may be conducted on an individual or group basis.
08.04 05 02 00	DRAMA
08.04 05 03 00	MUSIC
08.04 05 99 00	OTHER PERFORMING ARTS—Include here other organized subject matter and experiences emphasized in performing arts which are not listed above. (Specify.)
08.04 06 00 00	**Physical Recreation**
08.04 07 00 00	**Voluntary Service**
08.04 99 00 00	**Other Recreation**—Include here other organized subject matter and experiences emphasized in recreation which are not listed above. (Specify.)

HOME ECONOMICS
09.00 00 00 00

Home economics comprises the group of related courses or units of instruction organized for purposes of enabling pupils to acquire knowledge and develop understanding, attitudes, and skills relevant to (a) personal, home, and family life, and (b) occupational preparation using the knowledge and skills of home economics. The subject matter of home economics includes, in addition to that which is unique to the area, concepts drawn from the natural and social sciences and the humanities.

The Ad Hoc committee for Home Economics applied the following rationale to the selection of the items for placement in the Home Economics area: (1) the items were determined by consensus of the committee to be appropriate to home economics in terms of preparation for personal, home, and family living, and for occupational preparation; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified under Home Economics were identifiable by titles which were considered to be in current use in home economics.

Opportunities to develop leadership, social and civic awareness, and increased understanding of the world of work in home economics are provided through the Future Homemakers of America, a youth organization for home economics pupils. As an integral part of the instructional program, pupils in this organization engage in activities that extend their interests, skills, and knowledge in many aspects of home economics. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; they are discussed more fully in this chapter beginning on page 242. The Future Homemakers of America are identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 12 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11, and in figure 2 on page 13.

The following descriptive headings identify the various aspects of home economics.

09.01 00 00 00	**HOMEMAKING: PREPARATION FOR PERSONAL, HOME, AND FAMILY LIVING** The courses or units of instruction in home economics which emphasize acquisition of knowledge and the development of understanding, attitudes, and skills relevant to personal, home, and family life in the areas described below.
09.01 01 00 00	**Comprehensive Homemaking or Home Economics**—Instruction which derives content from a combination of the various areas of homemaking (as described by the items listed below) and emphasizes basic principles and interrelationships among these areas.
09.01 02 00 00	**Child Development**—The study of children—their physical, mental, emotional, and social growth and development—and their care and guidance. In practice, content draws on aspects of the social and biological sciences.
09.01 03 00 00	**Clothing and Textiles**—The study of clothing and textiles, including the significance of these to the individual and family, and the nature, acquisition, and uses of textiles and clothing products. Planned experiences in the selection, construction, maintenance, and alteration of clothing and other textile products are usually provided.
09.01 04 00 00	**Consumer Education**—(For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.) Emphasis in home economics will be on consumer education as it relates to management of a home and to the welfare of family members.
09.01 05 00 00	**Family Health**—The study of related aspects of health in family living with special emphasis on nutrition, emotional health, the relationship of the health of an individual to the well-being of the family, the prevention of illness, and the management and elementary skills involved in caring for the ill and convalescent in the home.
09.01 06 00 00	**Family Relations**—The study of the nature, functions, and significance of human relationships in the family. The subject matter includes concepts and principles related to various family living conditions, the establishment and maintenance of relationships, and the preparation for marriage and family life. These designated aspects of family relationships emphasize the universality of families, the uniqueness of individuals and families, the development and socialization of the individual, and meeting the variety of needs and interests of family members.
09.01 07 00 00	**Foods and Nutrition**—The study of food and its role in personal and family living, including the basic principles of health, food management, and economics. In practice, emphasis is frequently placed on meal management as a means of understanding the significance and nature of food, its care, and its preparation for individuals and families.
09.01 08 00 00	**Home Management**—The study of the complexities and processes involved in formulating goals, making decisions, and effectively using and controlling human and other resources for establishing and maintaining a home and family. The subject matter provides for a variety of home management considerations, such as the societal and economic influences on individual and family management, values, goals and standards, family economics, and the organization of activities in the home.
09.01 09 00 00	**Housing and Home Furnishings**—The study designed to develop judgment needed for creating a favorable environment for family living. Attention is given to a complex of housing and home furnishing considerations including the influence of housing on people; types and costs of housing; interior design; the care, maintenance, and improvement of homes and furnishings; and the relation of resources to family needs.
09.01 99 00 00	**Other Homemaking**—Include here other organized subject matter emphasized in homemaking which is not listed above. (Specify.)
09.02 00 00 00	**OCCUPATIONAL PREPARATION** The courses or units of instruction emphasizing the acquisition of competencies needed for getting and holding a job and/or preparing for advancement in an occupational area using home economics knowledge and skills. Instructional content is selected from home economics subject areas to meet the unique requirements in specific occupations and is coordinated with appropriate field, laboratory, and work experience. Occupations include those which provide (1) services to families in the home and similar services to others in group situations; (2) assistance to professional home economists and professionals in fields related to home economics in industries, agencies, and organizations; and (3) other services and/or assistance directly related to one or more home economics subject-matter areas. (Included as 16.05 00 00 00 *Home Economics-related Technology* under TECHNICAL EDUCATION)

09 HOME ECONOMICS—Continued

09.02 01 00 00 **Care and Guidance of Children**—Preparation for various kinds of employment related to child care centers and young children, e.g., assisting directors of child day-care centers or nursery schools, assisting with activities on playgrounds and in recreation centers, and caring for children in homes and in such public places as stores, playgrounds, recreation centers, and transportation terminals. (Included as 16.05 01 00 00 *Child Care Center Assistant*, 16.05 02 00 00 *Hospital Children's Division Assistant*, and 16.05 03 00 00 *Teacher's Assistant at the Preprimary Level* under TECHNICAL EDUCATION)

09.02 02 00 00 **Clothing Management, Production, and Services**—Preparation for employment concerned with clothing and textiles, e.g., fitting and altering readymade garments, custom tailoring and dressmaking, laundry-drycleaning work, demonstration work, and technical work in business and industry. (See also 17.33 00 00 00 *Textile Production and Fabrication* under TRADE AND INDUSTRIAL OCCUPATIONS.)

09.02 03 00 00 **Food Management, Production, and Services**—Preparation for various kinds of employment related to institutional and commercial food services. Employment may include workers and supervisors in hospitals, child day-care centers, homes for the elderly, and school lunch programs, and demonstrators and technicians in food industries. (Included as 16.05 04 00 00 *Food Service Supervisor* under TECHNICAL EDUCATION) (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

09.02 04 00 00 **Home Furnishings, Equipment, and Services**—Preparation for various kinds of employment related to home furnishings and/or equipment. It includes assisting purchasers in the selection of suitable home furnishings and/or equipment, assisting interior decorators, and custom-making of curtains, draperies, slip covers, and similar items. (Included as 16.05 05 00 00 *Interior Decorator Assistant* and 16.05 06 00 00 *Home Equipment Demonstrator* under TECHNICAL EDUCATION) (See also 04.10 00 00 00 *Home Furnishings* under DISTRIBUTIVE EDUCATION.)

09.02 05 00 00 **Institutional and Home Management and Supporting Services**—Preparation for various kinds of employment related to institutional and home management services. These include homemaker-home health aides, assistants to homemakers, management aides in public housing, institutional housekeeping, executive housekeeping, and hotel and motel housekeeping.

09.02 99 00 00 **Other Occupational Preparation**—Include here other aspects of occupational preparation not included above. (Specify.)

INDUSTRIAL ARTS
10.00 00 00 00

Industrial Arts is the body of related subject matter, or related courses, organized for the development of understanding about the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology. Learning experiences involve activities such as experimenting, designing, constructing, evaluating, and using tools, machines, materials, and processes which provide opportunities for creativity and problem solving.

The Ad Hoc Committee for Industrial Arts applied the following rationale to the selection of the items for placement in the Industrial Arts subject-matter area: (1) the items were determined by consensus of the committee to be appropriate to the area; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified were identifiable by titles which are considered to be most commonly used in current practice in industrial arts.

Opportunities to develop leadership, social and civic awareness, and increased understanding of industry and technology are provided through a student organization such as the Industrial Arts Student Club. As an integral part of the instructional program, students engage in activities that extend their interests, skills, and knowledge in selected aspects of industrial arts. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities.* A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; they are discussed more fully in this chapter beginning on page 242. The Industrial Arts Student Club is identified for reporting purposes and further described under Cocurricular Activities as Item 20. 01 15 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various aspects of industrial arts.

10.01 00 00 00 **CONSTRUCTION**
The study of the technology and the socio-economic contributions of those industries concerned with residential, industrial, and transportation structures. Learning activities, which are usually centered around scaled structures, involve research, design, engineering, masonry, carpentry, electricity, and plumbing.

10.02 00 00 00 **CRAFTS (INDUSTRIAL)**
A category of information and skills concerned with handcrafts and the craft industry, including the tools, materials, processes, products, and occupations of the industry. Subject matter and learning experiences are organized under various descriptive titles such as Art Metals, Ceramics, Crafts (Industrial), Industrial Crafts, Leather, Textiles, and other crafts (industrial).

10 INDUSTRIAL ARTS—Continued

10.02 01 00 00 **Art Metals**—The study of metals which are used in the manufacture or fabrication of ornamental products. Learning experiences generally include experimenting, designing, constructing, and evaluating art metal products.

10.02 02 00 00 **Ceramics**—The study of the tools, materials, and industrial processes involved in the manufacture of products made from non-metallic resources such as rocks, clay, glass, and sand, and the various types and uses of ceramic products. Learning experiences generally include experimenting, designing, constructing, and evaluating ceramic products.

10.02 03 00 00 **Crafts (Industrial)**—The study of craft industries including the tools and processes used to produce craft products from a wide variety of materials such as ceramics, leather, rocks, fibers, metals, and woods. Learning experiences generally include experimenting, designing, constructing, and evaluating useful products with emphasis on industrial applications.

10.02 04 00 00 **Industrial Crafts**—(See *Crafts (Industrial)*).

10.02 05 00 00 **Leather**—The study of leather and related materials including the tools and processes used to produce leather products. Learning experiences generally include experimenting, designing, constructing, and evaluating products.

10.02 06 00 00 ***Textiles**—The study of the tools, materials,* and processes used in the textile industry including the source, preparation, and applications of fibers. Learning experiences generally include experimenting, designing, weaving, and evaluating products made of a variety of fibers.

10.02 99 00 00 **Other Crafts (Industrial)**—Include here other organized subject matter and learning situations emphasized in crafts which are not listed above. (Specify.)

10.03 00 00 00 **DRAFTING**

A category of information and skills concerned with conveying ideas or illustrations graphically through drawings, charts, sketches, maps, and graphs, and the related factors such as the role of drafting in history and industry. Subject matter and learning experiences are organized under various descriptive titles such as Architectural Drafting, Descriptive Geometry, Drafting, Drafting Technology, Engineering Drawing, Industrial Design, Mechanical Drawing, Technical Illustration, and other drafting. (See also 17.13 00 00 00 *Drafting Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

10.03 01 00 00 **Architectural Drafting**—The study of the means of communicating, through lines and symbols, information about buildings. Learning activities include the development of preliminary sketches, plans, elevations, sections, and detail drawings, and the study of architectural design, the history of structures, building ordinances, and building materials.

10.03 02 00 00 **Descriptive Geometry**—The study of the representation of points, lines, and surfaces by accurate orthographic drawing and the graphical solution of problems according to form and position in space.

10.03 03 00 00 **Drafting**—The study of the communication of ideas through drawings, sketches, charts, graphs, and maps. Learning experiences include the development of skills through the use of drafting instruments involved in lettering, sketching, geometric construction, orthographic and pictorial drawing, auxiliaries, sections, and working drawings.

10.03 04 00 00 **Drafting Technology**—The study of graphic representation with special emphasis on technical requirements, specifications, and standards.

10.03 05 00 00 **Engineering Drawing**—A study of the communication of ideas through lines, symbols, and drawings depicting the mechanical details associated with machine parts, including machine design. Learning activities involve the use of technical drawing instruments and techniques.

10.03 06 00 00 **Industrial Design**—The study of industrial products with special consideration being given to (1) esthetics and the appropriate use of industrial materials and processes, and (2) their value to society. Learning activities involve the development of skills and creative abilities in the use of media for conveying ideas graphically. (See also 02.02 03 02 00 *Industrial Product Design* under ART.)

10.03 07 00 00 **Mechanical Drawing**—A study of the communication of ideas through lines, symbols, and drawings. Learning activities involve the use of technical drawing instruments to convey ideas graphically, e.g., orthographic projection, pictorial views, and assembly drawings.

10.03 08 00 00 **Technical Illustration**—The study of the techniques of presenting information graphically, including schematics, sections, exploded views, and other techniques which illustrate or clarify verbal or written description.

10.03 99 00 00 **Other Drafting**—Include here other organized subject matter and learning situations emphasized in drafting which are not listed above. (Specify.)

10.04 00 00 00 **ELECTRICITY/ELECTRONICS**

A category of information and skill concerned with electrical energy including theory, applications, and control as they relate to electrically powered equipment, to various kinds of communications equipment, and to related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Electricity, Electricity/Electronics, Electronics, and other electricity/electronics. (See also 17.14 00 00 00 *Electrical Occupations*, and 17.15 00 00 00 *Electronics Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

10.04 01 00 00 **Electricity**—The study of sources, and measurement, control, and applications of electrical energy as used for heating, power, and illumination, as well as some elementary aspects of the use of electrical energy for communication as in devices such as the telegraph, telephone, and radio. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

10.04 02 00 00 **Electricity/Electronics**—The study of sources, measurement, control, and applications of electrical energy in devices such as those used in heating, power, and illumination, as well as those used in communications, e.g., the telegraph, telephone, radio, television, radar, and computers. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

10.04 03 00 00 **Electronics**—The study of the measurement, control, and applications of electrical energy in devices used for communication such as the telegraph, telephone, radio, television, radar, and computers. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

10.04 99 00 00 **Other Electricity/Electronics**—Include here other organized subject matter and learning situations primarily related to and emphasized in electrical energy which are not listed above. (Specify.)

10.05 00 00 00 ELEMENTARY SCHOOL INDUSTRIAL ARTS

That phase of the elementary school curriculum which provides the child with opportunities for exploration, manipulation, experimentation, planning, and using tools, materials, and techniques appropriate to converting materials to serve useful purposes. Planned activities and experiences include (1) the construction of projects related to and reinforcing the elementary school subject matter, and (2) an introductory study of industry.

10.05 01 00 00 **Industrial Arts in the Elementary School (Grades or Years K-4)**—Basic experiences in industrial arts used to reinforce the instructional program for the grades or years kindergarten through four. Activities include working with tools and materials and are designed to help pupils (1) improve communication skills by means of experience charts; (2) discover concepts of construction of objects using many materials; (3) apply industrial arts experiences to varied aspects of subject matter; (4) discover and explore interests and talents; and (5) develop concepts of preplanning and organizing learning activities.

10.05 02 00 00 **Intermediate Industrial Arts Program (Grades or Years 5 and 6)**—Subject matter and experiences in industrial arts which are planned to utilize maximally pupils' desires to formulate ideas and design and engage in constructional project activities. Instruction emphasizes the development of fundamental tool skills and knowledge in basic industrial arts and is designed to relate to and supplement learning in the various subject-matter areas.

10.05 99 00 00 **Other Elementary School Industrial Arts**—Include here other organized subject matter and experiences emphasized in elementary school industrial arts which are not listed above. (Specify.)

10.06 00 00 00 GENERAL INDUSTRIAL ARTS (FORMERLY GENERAL SHOP)

The study of two or more separate and somewhat distinct aspects of industry and technology. Learning experiences involve activities such as experimenting, designing, constructing, evaluating, and using a variety of tools, materials, and processes.

10.07 00 00 00 GRAPHIC ARTS

The study of information and skills concerned with graphic reproduction, as well as related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Graphic Arts, Photography, Photolithography (Photo-offset-lithography or offset), Printing, and other graphic arts.

10.07 01 00 00 **Graphic Arts**—The study of tools, materials, and processes of the printing industry including block printing, intaglio printing, letterpress printing, lithography, photography, rubberstamp construction, silk screen printing, thermography, type composition, and binding. Learning experiences include designing, composing, printing, and evaluating reproduction techniques, and the study of history, economics, occupations, and consumer information related to the printing industry.

10.07 02 00 00 **Photography**—The study of the tools, materials, and processes used in photography with emphasis on industrial uses. Learning activities include experiences using cameras, developing negatives, and making contact prints, enlargements, and mountings.

10.07 03 00 00 **Photolithography (Photo-offset-lithography or Offset)**—The study of the technology of graphic reproduction from a flat surface or plate prepared photomechanically. Learning experiences include design, hot and/or cold composition, pasteup, camera and darkroom techniques, platemaking, and offset presswork.

10.07 04 00 00 **Printing**—The study of the industry and technology involved in graphic reproduction from an inked surface—relief, intaglio, or flat. Activities include design, composition, imposition, presswork, and bindery.

10.07 99 00 00 **Other Graphic Arts**—Include here other organized subject matter and learning situations emphasized in graphic arts which are not listed above. (Specify.)

10.08 00 00 00 HOME MECHANICS

The study of the tools, materials, and processes involved in the upkeep and repair of the home, its equipment, and devices. Learning activities are centered around typical problems encountered by the homeowner and include simple maintenance, repairs, and construction.

10.09 00 00 00 INDUSTRIAL ARTS MATHEMATICS

(For definition see 11.05 03 00 00 *Shop Mathematics* under MATHEMATICS.)

10.10 00 00 00 INDUSTRIAL ARTS SCIENCE (APPLIED CHEMISTRY)

A body of selected subject matter which is sometimes referred to as Practical or Industrial Chemistry. The subject matter is introductory in nature and is designed primarily for nonscience-oriented pupils in vocational and technical instructional programs. It is usually descriptive, less quantitative, and less theoretical than other chemistry courses. The topics are technological in orientation and are usually selected for applications in industry and technology. (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences*, under NATURAL SCIENCES.)

10.11 00 00 00 INDUSTRIAL ARTS SCIENCE (APPLIED PHYSICS)

A technologically or industrially oriented physics course in which the subject matter is less quantitative and theoretical than regular secondary school physics. Although laboratory exercises are an important part of the course they are usually more of the "follow-the-direction" type having practical applications. Applied physics is sometimes offered in junior college, technical, and vocational education instructional programs. (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences*, under NATURAL SCIENCES.)

10.12 00 00 00 **INDUSTRIAL MATERIALS AND PROCESSES**

A category of information and skills concerned with industrial-technical materials and processes including their properties and utilization as they are fabricated into usable products. Subject matter and learning experiences are organized under various descriptive titles such as Fluid Power, Industrial Materials, Industrial Materials and Processes, Industrial Processes, Instrumentation, Numerical Control, and other industrial materials and processes.

10.12 01 00 00 **Fluid Power**—The study of hydraulics and pneumatics, including power conversion, transmission, and utilization in both stationary and mobile installations.

10.12 02 00 00 **Industrial Materials**—The study, analysis and testing of industrial materials, e.g., metals, hydrocarbons, wood, finishes, plastics, and earth materials, chemical composition, physical and mechanical properties, fabrication limitations, and performance when exposed to a normal industrial and commercial environment.

10.12 03 00 00 **Industrial Materials and Processes**—The study of the properties and utilization of industrial materials as they are fabricated into usable products, including a study of the utilization and control of the power necessary to efficiently process materials.

10.12 04 00 00 **Industrial Processes**—The study of the methods whereby industrial materials are fabricated by hand, machine, and automated equipment to produce usable products.

10.12 05 00 00 **Instrumentation**—The study of devices necessary to observe and control both manufacturing processes and the performance of mechanical and electrical machinery, including the science of measurement as well as the conversion and recording of physical, chemical, and mechanical state and condition into sensible information.

10.12 06 00 00 **Numerical Control**—The study of industrial automation in which specific commands to perform desired machine tool operations are supplied to the machine control mechanisms by means of information previously programmed by punched card, punched tape, or magnetic tape.

10.12 99 00 00 **Other Industrial Materials and Processes**—Include here other organized subject matter and learning situations primarily related to and emphasized in industrial materials and processes which are not listed above. (Specify.)

10.13 00 00 00 **MANUFACTURING**

The study of the technology and the socioeconomic contributions of industries concerned with the creation of durable consumer products. Learning experiences are developed around functions or concepts of industry and include research and experimentation, product design and development, fabrication (custom and mass), packaging, and distribution.

10.14 00 00 00 **METALS**

A category of information and skills concerned with metals including the products manufactured from metals; the technology employed in the production, processing, and use of metals; and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Metals, Metal Machining (Metal Shop), Metal Technology, Sheet Metal, Welding, and other metals.

10.14 01 00 00 **Metals**—The study of the tools, materials, and processes used in several facets of the metals industries. Learning experiences generally include experimenting, designing, fabricating, forming, and evaluating metals and metal products.

10.14 02 00 00 **Metal Machining (Metal Shop)**—The study of the operations and related information concerned with the shaping of metals by machine.

10.14 03 00 00 **Metal Technology**—The study of the problems and operations involved in the transformation of metal into usable products with special emphasis on technical information, qualities, specifications, and standards. Learning experiences include experimenting, creating, designing, constructing, and evaluating metal products.

10.14 04 00 00 **Sheet Metal**—The study of the operations, problems, and related information concerned with forming and fabricating sheet metal products.

10.14 05 00 00 **Welding**—The study of the operations used in cutting and fabricating metal products by welding techniques.

10.14 99 00 00 **Other Metals**—Include here other organized subject matter and learning situations primarily related to and emphasized in metals which are not listed above. (Specify.)

10.15 00 00 00 **PLASTICS**

A category of information and skills concerned with the production, processing, and uses of plastics, and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Plastics, Plastics Technology, and other plastics.

10.15 01 00 00 **Plastics**—The study of the tools, materials, and processes used in several facets of the plastics industry. Learning experiences include experimenting, designing, machining, fabricating, forming, and evaluating plastics and plastic products.

10.15 02 00 00 **Plastics Technology**—The study of the problems and operations involved in the manufacture and transformation of plastics into usable products with special emphasis on technical information, qualities, specifications, and standards. Learning experiences include experimenting, creating, designing, fabricating, forming, and evaluating plastic products.

10.15 99 00 00 **Other Plastics**—Include here other organized subject matter and learning situations primarily related to and emphasized in plastics which are not listed above. (Specify.)

10.16 00 00 00 **POWER/AUTOMOTIVE MECHANICS**

A category of information and skills concerned with the various forms of power, including its generation, transmission, and utilization. Subject matter and learning experiences are organized under various descriptive titles such as Automotive Mechanics, Power and Automotive Mechanics, Power Mechanics, Transportation, and other power and automotive mechanics. (See also 16.01 04 00 00 *Automotive Technology* under TECHNICAL EDUCATION, and 17.03 00 00 00 *Automotive Services* under TRADE AND INDUSTRIAL OCCUPATIONS.)

10.16 01 00 00 **Automotive Mechanics**—The study of the operating principles, design, construction, maintenance, and repair of automobiles and similar power sources, including developing understanding of related physical and chemical principles.

10.16 02 00 00 **Power/Automotive Mechanics**—The study of the technology involved in harnessing and controlling power, including its source, generation, transmission, and utilization, with specific emphasis on the automobile as a device of power conversion, transmission, and utilization.

10.16 03 00 00 **Power Mechanics**—The study of the development, transmission, and utilization of power, including the theory, maintenance, and servicing of machines and devices for the conversion of power into useful forms. Methods and devices for the transmission of power and output machinery for utilizing power are emphasized.

10.16 04 00 00 **Transportation**—The study of operating principles, design, construction, maintenance, and repair of transportation devices, e.g., automobiles, airplanes, trains, and boats, including an understanding of related physical and chemical principles.

10.16 99 00 00 **Other Power/Automotive Mechanics**—Include here other organized subject matter and learning situations primarily related to and emphasized in power and automotive mechanics which are not listed above. (Specify.)

10.17 00 00 00 **RESEARCH AND DEVELOPMENT**

The study of industrial-technical problems, including provisions for individual or group investigations of problems and opportunities to evaluate their solutions by designing, constructing, and testing projects.

10.18 00 00 00 **SERVICE INDUSTRIES**

The study of the technology of industries concerned with the maintenance and repair of consumer and/or industrial products. Learning experiences involve diagnosing, adjusting, replacing, rebuilding, installing, testing, or refinishing these products. Usually, the problems of small service business management and human relations are included for study.

10.19 00 00 00 **WOODS**

A category of information and skills concerned with woods, including various manufactured wood products, the technology employed in the manufacture and construction of products using woods, and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Woods, Woods Technology, and other woods.

10.19 01 00 00 **Woods**—The study of the tools, materials, and processes used in the woods industries. Learning experiences usually include experimenting with, designing and constructing wood products, and evaluating woods and wood products, using the tools, materials, and processes related to these industries. The study of such factors as techniques, economics, and consumer information relating to these industries is emphasized.

10.19 02 00 00 **Woods Technology**—A study of the woods manufacturing industries and the technology involved in the construction of buildings and the manufacture of articles made from wood and wood products. Learning experiences include experimenting with, designing, constructing, operating, and evaluating industrial tools, processes, forest products, and related synthetic materials.

10.19 99 00 00 **Other Woods**—Include here other organized subject matter and learning situations primarily related to and emphasized in woods which are not listed above. (Specify.)

10.99 00 00 00 **OTHER INDUSTRIAL ARTS**

Include here other organized subject matter and learning situations emphasized in industrial arts which are not listed or classifiable in one of the above major categories. (Specify.)

MATHEMATICS
11.00 00 00 00

Mathematics comprises the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with the science of relations existing between quantities (magnitude) and operations and the science of methods used for deducing from other quantities, known or supposed, the quantities sought.

The Ad Hoc Committee for Mathematics applied the following rationale to the selection of the items for placement in the Mathematics area: (1) the items selected and classified were determined by consensus of the committee to include the aspects of mathematics most commonly taught in the United States; (2) the various aspects of subject matter selected for classification could be defined in brief form using only salient descriptive elements; and (3) the items were identifiable by titles which were considered to be most commonly used in current practice in mathematics.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of mathematics as an integral part of the instructional program. As an example, the Mathematics Club provides additional opportunities to explore interests, apply various acquired skills, and increase knowledge about different aspects of mathematics. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities.* A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Mathematics Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 20 00 00.

11 MATHEMATICS—Continued

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations on these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the mathematics area.

11.01 00 00 00	**ELEMENTARY - SCHOOL MATHEMATICS (K-6)** Mathematics subject matter, designed for the elementary school, which usually is concerned with the study of various aspects of arithmetic, informal algebra, and informal geometry. An overall goal is understanding accompanied by reasonable efficiency in both the computational and applicational phases of mathematics. Toward this end certain emphases permeate all topics and all grade levels. Among these are (1) the use of manipulative and pictured materials to clarify ideas and to build meanings; (2) recognition of the role of mathematics in real life and its use in problem solving situations; (3) the rationale of the decimal numeration system and of the algorithms of the operations; (4) the relationships which exist within a single operation, between two operations, and among the four operations; (5) the continuous development of the concepts which are basic to any topic studied, from the simplest beginnings to whatever extensions and expansions are consistent with the learner's ability to comprehend; (6) provision for prerequisite learnings for later topics; (7) the use of methods which will interest, stimulate, and motivate the pupil; and (8) appropriate adjustments for variations in the abilities of pupils. In practice, the subject matter usually is organized on a spiral plan. By means of this plan pupils study the same subject-matter topic two or more years or grade-placement levels, each time at a higher level of difficulty. Generally included in the K-6 mathematics program are the following topics: (Indicate the topics emphasized.)
11.01 00 01 00	Sets, number, numerals
11.01 00 02 00	Cardinal number, ordinal number
11.01 00 03 00	Place value as related to numeration systems with emphasis on the decimal system
11.01 00 04 00	Number systems: whole numbers, integers, and rationals
11.01 00 05 00	Basic operations: addition, subtraction, multiplication, division, and factoring (e.g., halving)
11.01 00 06 00	Variables: frames, letters, and other symbols
11.01 00 07 00	Properties of operations on: whole numbers, integers, and rationals
11.01 00 08 00	The rationale of computation: algorithms involving whole and rational numbers
11.01 00 09 00	Ratio: proportion, percent
11.01 00 10 00	Prime and composite numbers: factors and multiples
11.01 00 11 00	Order relations: equality and inequality
11.01 00 12 00	The number line
11.01 00 13 00	Measurement, e.g., units of measurement, nature of measurement, length, area, perimeter, and volume
11.01 00 14 00	Informal geometry, e.g., form and pattern as observed in the physical world, intuitive development of such concepts as geometrical point, line, line segment, ray, angle, simple closed curve, plane, polygons, and space figures
11.01 00 15 00	Informal algebra: number sentences, formulas, graphing, and a number line
11.01 00 99 00	OTHER ELEMENTARY-SCHOOL MATHEMATICS TOPICS—Include here other topics emphasized in elementary-school mathematics which are not listed above. (Specify.)
11.02 00 00 00	**MATHEMATICS (7TH AND 8TH GRADES)** Mathematics subject matter designed for the junior high school and concerned with extending the various aspects of arithmetic, algebra, and informal geometry taught in the elementary school. There are also more advanced topics introduced on an informal basis. Emphasis is on (a) expanding the topics studied in the elementary school and introducing advanced topics consistent with the learners' ability to comprehend, (b) the application of mathematics, (c) methods of problem solving, and (d) metric and nonmetric geometry.
11.02 01 00 00	**Arithmetic**—The following topics in arithmetic are usually included in mathematics for grades 7 and 8: (Indicate the topics emphasized.)
11.02 01 01 00	System of numeration in base ten, possibly contrasting it with other bases
11.02 01 02 00	Rationale of the computational processes
11.02 01 03 00	Nature and properties of the systems of numbers, e.g., natural numbers, whole numbers, integers, rational numbers, and real numbers
11.02 01 04 00	Representation of numbers by terminating and nonterminating decimal fractions
11.02 01 05 00	Very large and very small numbers, scientific notation, approximation, and precision
11.02 01 06 00	Ratios, proportions, and percents
11.02 01 99 00	OTHER ARITHMETIC TOPICS—Include here other topics emphasized in arithmetic for grades 7 and 8 which are not listed above. (Specify.)
11.02 02 00 00	**Geometry**—The following topics in geometry are usually included in mathematics for grades 7 and 8: (Indicate the topics emphasized.)
11.02 02 01 00	Lines, angles, triangles, polygons, circles, and solids; calculation of perimeters, areas, and volumes of polygons, circles, and solids
11.02 02 02 00	Measurements, e.g., length, area, angles, volume, and weight, including metric measurement
11.02 02 03 00	Similarity and congruence of polygons
11.02 02 04 00	Parallelism and perpendicularity
11.02 02 05 00	Uses of various instruments, including the straightedge, protractor, and compass for constructing geometric figures

11 MATHEMATICS—Continued

11.02 02 06 00	Construction of geometric models
11.02 02 07 00	Nonmetric geometry
11.02 02 99 00	OTHER GEOMETRY TOPICS—Include here other topics emphasized in geometry for grades 7 and 8 which may be identified in the list under 11.12 00 00 00 *Geometry*. Also, include topics emphasized that do not appear in the list above or under *Geometry*. (Specify.)
11.02 03 00 00	**Algebra and Statistics**—The following topics in algebra and statistics are usually included in mathematics for grades 7 and 8: (Indicate the topics emphasized.)
11.02 03 01 00	Reading and constructing statistical graphs
11.02 03 02 00	Representing numbers by symbols
11.02 03 03 00	Operations with symbols
11.02 03 04 00	Formulas, including those used in measurement and percentage
11.02 03 05 00	Integers, rationals, and real numbers
11.02 03 06 00	Graphs on number line and number plane; of simple equalities and inequalities
11.02 03 99 00	OTHER ALGEBRA AND STATISTICS TOPICS—Include here other topics emphasized in algebra and statistics for grades 7 and 8 which may be identified in the list under 11.03 00 00 00 *Algebra* and/or 11.15 00 00 00 *Probability and Statistics*. Also, include topics emphasized that do not appear in the list above or under *Algebra* or *Probability and Statistics*. (Specify.)
11.03 00 00 00	**ALGEBRA** An organization of mathematics subject matter concerned (through high school) primarily with the properties of number systems, i.e., the real number system and the complex number system. Although the content of high school algebra has been expanded in the direction of structure (including proof), manipulative skills are emphasized. In some high school courses topics such as groups, rings, and integral domains as well as work on the various kinds of fields have also been introduced. Topics selected from the following list (11.03 00 01 00 through 11.03 00 99 00), as well as topics not listed below, may serve to describe the instructional content of algebra—first-year, second-year, third-year, and other algebra.
11.03 01 00 00	**First-year**—(For a description of the subject matter select from the topics which follow.)
11.03 02 00 00	**Second-year**—(For a description of the subject matter select from the topics which follow.)
11.03 03 00 00	**Third-year**—(For a description of the subject matter select from the topics which follow.)
11.03 00 01 00	Symbols and their referents (numerals and numbers)
11.03 00 02 00	Variables
11.03 00 03 00	Sentence forms (open sentences) and statements
11.03 00 04 00	Numerical expressions and algebraic expressions
11.03 00 05 00	Symbols for grouping and conventions for omitting them
11.03 00 06 00	Principal operators; indicated sums and products; polynomials
11.03 00 07 00	Introduction to the real numbers (directed numbers)
11.03 00 08 00	Addition and multiplication of reals
11.03 00 09 00	Additive inverses (opposites) and multiplicative inverses, (reciprocals)
11.03 00 10 00	Inverse operations (subtraction and division of reals)
11.03 00 11 00	Evaluating algebraic expressions
11.03 00 12 00	Field properties of the real number system
11.03 00 13 00	Order and the real numbers, the number line
11.03 00 14 00	Absolute value and distance on the number line
11.03 00 15 00	Graphs on the number line: simple equations and inequalities in one variable
11.03 00 16 00	Open sentences and their solution sets
11.03 00 17 00	The real number system as an ordered field
11.03 00 18 00	Deductive organization, postulates, proof
11.03 00 19 00	Equivalent expressions, simplifying, expanding, and factoring
11.03 00 20 00	Equivalent equations and equivalent inequalities
11.03 00 21 00	Equivalent expressions containing fractions
11.03 00 22 00	Equations containing fractions; ratio, proportion
11.03 00 23 00	Sets and set notation; subsets, intersection, union
11.03 00 24 00	Sets of ordered pairs; Cartesian products; relations; functions
11.03 00 25 00	The number plane lattice (of integers)
11.03 00 26 00	The number plane
11.03 00 27 00	Graphs on the number plane and the number plane lattice: equations and inequalities
11.03 00 28 00	Simultaneous (systems of) equations and inequalities
11.03 00 29 00	Quadratic equations and inequalities
11.03 00 30 00	Discriminant of a quadratic
11.03 00 31 00	Constant functions
11.03 00 32 00	Linear functions
11.03 00 33 00	Quadratic functions
11.03 00 34 00	Variation
11.03 00 35 00	The positive integers
11.03 00 36 00	The integers
11.03 00 37 00	Mathematical induction
11.03 00 38 00	The rationals
11.03 00 39 00	Positive integral exponents
11.03 00 40 00	Integral exponents
11.03 00 41 00	Word problems
11.03 00 42 00	Systems of equations (3 and 4 variables)
11.03 00 43 00	Upper and lower bounds
11.03 00 44 00	Least upper bound and greatest lower bound
11.03 00 45 00	Well-ordering principle
11.03 00 46 00	Completeness and the real number system as a complete ordered field
11.03 00 47 00	Radicals
11.03 00 48 00	Square root and decimal approximations
11.03 00 49 00	Rational exponents
11.03 00 50 00	Equations involving radicals
11.03 00 51 00	Formulas
11.03 00 52 00	Scientific notation
11.03 00 53 00	Sequences
11.03 00 54 00	Continued sums and Σ-notation

11 MATHEMATICS—Continued

11.03 00 55 00 Continued products and π-notation

11.03 00 56 00 Difference sequences

11.03 00 57 00 Arithmetic sequences (progressions)

11.03 00 58 00 Geometric sequences (progressions)

11.03 00 59 00 Combinations

11.03 00 60 00 Permutations

11.03 00 61 00 Probability

11.03 00 62 00 Binomial Theorem for positive integral exponents

11.03 00 63 00 Extended Binomial Theorem

11.03 00 64 00 Factor theorem

11.03 00 65 00 Remainder theorem

11.03 00 66 00 Synthetic division

11.03 00 67 00 Determinants

11.03 00 68 00 Matrices

11.03 00 69 00 Vectors

11.03 00 70 00 Limits

11.03 00 71 00 Continuous functions

11.03 00 72 00 Complex numbers

11.03 00 99 00 OTHER TOPICS IN ALGEBRA—Include here other topics emphasized in algebra which are not listed above. (Specify.)

11.03 04 00 00 College Algebra—(The subject matter is the same as or similar to 11.03 03 00 00 *Algebra—Third-year* and/or 11.09 00 00 00 *Elementary Functions.*)

11.03 05 00 00 Intermediate Algebra—(The subject matter is the same or similar to 11.03 02 00 00 *Algebra—Second-year.*)

11.03 06 00 00 Linear Algebra—The study of the linear operations of vector addition and multiplication by scalars, and of transformations which preserve these operations. The multivariable aspect of linear algebra is one of its extensions of ordinary algebra. Topics such as the following are usually included: simultaneous linear equations, vectors, linear dependence, bases, dimension, geometry of lines and planes in spaces of any dimension, convexity, inner products, orthogonal bases, linear transformations and their representation as matrices, matrix algebra, determinants, eigenvalues, eigenvectors, and conical forms; the standard forms of conics and other applications.

11.03 99 00 00 Other Algebra—Include here other organized subject matter emphasized in algebra which is not listed above. (Specify.)

11.04 00 00 00 ALGEBRA AND TRIGONOMETRY (INTEGRATED)

An organization of subject matter frequently provided for a third or fourth year of study in a sequence of mathematics offerings. The subject matter usually is selected and organized to prepare pupils, having competency in mathematics, for the study of calculus and analytic geometry in a college or other posthigh school instructional program requiring proficiency in mathematics. The subject matter is essentially college level in nature, and usually includes topics in algebra and trigonometry such as the following:

11.04 00 01 00 Elementary functions and graphs: linear and quadratic functions, exponential and logarithmic functions, and others

11.04 00 02 00 Mathematical induction

11.04 00 03 00 Polynomials: remainder theorem, factor theorem, synthetic theorem, and others

11.04 00 04 00 Complex numbers

11.04 00 05 00 Circular functions: solution of triangles, trigonometric functions and their graphs, analytic trigonometry, identities and equations, and others

11.04 00 99 00 OTHER TOPICS IN ALGEBRA AND TRIGONOMETRY (INTEGRATED)—Include here other topics emphasized in algebra and trigonometry (integrated) which are not listed above. (Specify.)

11.05 00 00 00 APPLIED MATHEMATICS

Mathematics courses designed and provided for study as alternatives to the sequentially organized college-preparatory or general education mathematics courses. Subject matter usually is comprised of selected aspects of mathematics used in practical and specialized situations in daily life. The subject matter is treated under various descriptive titles, such as: Business Arithmetic, Consumer Mathematics, Shop Mathematics, and other applied mathematics.

11.05 01 00 00 Business Arithmetic—The study of various aspects of arithmetic which apply particularly to business problems. Usually included in the mathematics subject matter for business applications are (1) the rationale of computation by means of the four basic operations with the rational numbers; (2) the decimal numeration system; (3) ratio, proportion, and percent; (4) measurement; (5) formulas; and (6) graphs. (Included as 03.05 00 00 00 *Business Arithmetic or Mathematics* under BUSINESS)

11.05 02 00 00 Consumer Mathematics—The study of various applications of arithmetic, informal algebra, and informal geometry which apply particularly to consumer problems. Usually included in the mathematics subject matter for consumer applications are (1) the rationale of computation by means of the four basic operations with real numbers; (2) ratio, proportion, and percent; (3) linear, area, volume, and angular measurement; (4) graphs and descriptive statistics; and (5) simple equations and formulas.

11.05 03 00 00 Shop Mathematics—The study of various applications of arithmetic, informal algebra, and informal geometry which apply particularly to shop problems. Usually, the mathematics subject matter for shop applications includes (1) the rationale of computation by means of the four basic operations with real numbers; (2) linear, area, volume, and angular measurement; (3) the decimal numeration system; (4) informal algebra; (5) informal geometry; (6) numerical trigonometry; and (7) mathematical tables, graphs, and the slide rule. (Included as 10.09 00 00 00 *Industrial Arts Mathematics* under INDUSTRIAL ARTS.)

11.05 99 00 00 Other Applied Mathematics—Include here other organized subject matter emphasized in applied mathematics which is not classified above. (Specify.)

11.06 00 00 00 CALCULUS

The study of two fundamental limits, called the derivative and the integral, and their evaluation by means of a function algebra called "the calculus." Usually, three to four semesters are required to cover the following topics in calculus. Topics selected from the following (11.06 00 01 00 through 11.06 00 99 00), as well as topics not listed below, may be used to describe the instructional subject matter of first-year and second-year calculus.

11 MATHEMATICS—Continued

11.06 01 00 00	**First-year Calculus**—(For a description of the subject matter select from the topics which follow.)
11.06 02 00 00	**Second-year Calculus**—(For a description of the subject matter select from the topics which follow.)
11.06 00 01 00	Functions and limits, continuity
11.06 00 02 00	Derivatives and applications
11.06 00 03 00	Differentiation of polynomials: of algebraic, logarithmic, exponential, and trigonometric functions
11.06 00 04 00	Maxima and minima
11.06 00 05 00	Rate problems: motion in a curve, velocity, and acceleration
11.06 00 06 00	The definite integral and application to areas, volumes, distributions averages, and moments
11.06 00 07 00	The fundamental theorem and techniques of integration
11.06 00 08 00	Numerical calculus
11.06 00 09 00	Theorem of the mean and extension to Taylor's Theorem
11.06 00 10 00	Indefinite sequences, series, indeterminate forms, improper integrals, and other special limits
11.06 00 11 00	Multivariate calculus, including partial differentiation, the differential, and multiple integrals
11.06 00 12 00	Vector calculus: gradients, directional derivative, vector products, vector fields, divergence, and curl
11.06 00 13 00	Differential equations and applications
11.06 00 99 00	OTHER TOPICS IN CALCULUS—Include here other topics emphasized in calculus which are not listed above. (Specify.)
11.07 00 00 00	**CALCULUS WITH ANALYTIC GEOMETRY** Usually, the study of intermediate algebra, trigonometry, and elementary functions as prerequisite to the study of calculus with analytic geometry. The integrated approach is an alternative approach to analytic geometry followed by calculus. Calculus topics are the same as those for the standard calculus course, but the analytic geometry is usually reduced to a minimum. Analytic geometry topics frequently include the following: a brief introduction to coordinate geometry, properties of the real number line with emphasis on inequalities and absolute value, neighborhoods and other intervals in the line, slopes and lines, curves, functions and limits, conics, parametric representations of curves, polar coordinates, and rudiments of solid analytic geometry of curves and surfaces.
11.08 00 00 00	**COMPUTER MATHEMATICS** Mathematics subject matter designed for study by pupils who plan to work closely with computers. Consideration is given to the algorithmic approach to mathematics which enables a problem to be handled by a machine. A first course may include the following topics: (See also 03.17 03 00 00 *Computer-oriented Mathematics* (*Data-processing Mathematics*) under BUSINESS.)
11.08 00 01 00	Description of the logical structure of the computer operations (not the machine)
11.08 00 02 00	Algorithms for the computer
11.08 00 03 00	Programming languages (Fortran or Algol or others)
11.08 00 04 00	Compilers
11.08 00 05 00	Problem solving in numerical and nonnumerical situations
11.08 00 99 00	OTHER TOPICS IN COMPUTER MATHEMATICS—Include here other topics emphasized in computer mathematics which are not listed above. (Specify.)
11.09 00 00 00	**ELEMENTARY FUNCTIONS** A body of subject matter in the calculus-preparatory sequence which is designed to bridge the gap from *Intermediate Algebra* to *Calculus with Analytic Geometry*—alternative to and overlapping *College Algebra.* The subject matter is concerned with the study of the elementary functions, their graphs and applications. Usually, the following topics are included for study:
11.09 00 01 00	Polynomials
11.09 00 02 00	Rational and algebraic functions
11.09 00 03 00	Exponential functions
11.09 00 04 00	Logarithmic functions
11.09 00 05 00	Trigonometric functions as periodic functions on the real number line
11.09 00 06 00	Introduction to three-dimensional analytic geometry
11.09 00 99 00	OTHER TOPICS IN ELEMENTARY FUNCTIONS—Include here other topics emphasized in elementary functions which are not listed above. (Specify.)
11.10 00 00 00	**FIRST-YEAR COLLEGE MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS** The study of mathematics subject matter which usually includes the following topics:
11.10 00 01 00	Field axioms as they are used in arithmetic
11.10 00 02 00	Logic and its place in mathematical proof
11.10 00 03 00	Numeration systems and the meaning of place value
11.10 00 04 00	Use of sets and the number line in explaining the meaning of number operations
11.10 00 99 00	OTHER TOPICS IN FIRST-YEAR COLLEGE MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS—Include here other topics emphasized in first-year college mathematics for elementary school teachers which are not listed above. (Specify.)
11.11 00 00 00	**GENERAL MATHEMATICS** An organized body of mathematics subject matter which frequently comprises an alternative to the sequence of college-preparatory mathematics courses. In practice, a first course in general mathematics is frequently offered in the 9th grade followed by additional courses in the 10th, 11th, and/or 12th grades. The subject matter for each course in general mathematics may be identified from among the topics listed below:
11.11 01 00 00	**First-year General Mathematics**—(For description of the subject matter select from the following topics.)
11.11 01 01 00	ARITHMETIC—The following topics in arithmetic are frequently included in general mathematics:
11.11 01 01 01	Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers
11.11 01 01 02	Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount,

	taxes, commissions, insurance, social security, and installment buying
11.11 01 01 03	Elementary number theory: primes, factors, and composites
11.11 01 01 99	*Other Arithmetic Topics in First-year General Mathematics*—Include here other topics in arithmetic emphasized in the first year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not listed above or under *Mathematics (7th and 8th grades)* (Specify.)
11.11 01 02 00	GEOMETRY—Topics in geometry studied in general mathematics frequently include:
11.11 01 02 01	Measurement such as angular, area, length, and volume
11.11 01 02 02	Use of instruments such as the straightedge, compass, and protractor for construction of geometric figures
11.11 01 02 03	Calculation of perimeter, area, and volume
11.11 01 02 04	Construction of models: two-dimensional, three-dimensional
11.11 01 02 05	Indirect measurement including scale drawing, similar triangles, and numerical trigonometry
11.11 01 02 06	The Pythagorean rule and its application
11.11 01 02 99	*Other Geometry Topics in First-year General Mathematics*—Include here other topics in geometry emphasized in the first year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)
11.11 01 03 00	ALGEBRA AND STATISTICS—Topics in algebra and statistics studied in general mathematics frequently include:
11.11 01 03 01	Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities
11.11 01 03 02	Ratio and proportions, trigonometry of the right triangle
11.11 01 03 03	Calculation of mean, median, and mode
11.11 01 03 04	Statistical graphs
11.11 01 03 05	Informal numerical probability
11.11 01 03 99	*Other Algebra and Statistics Topics in First-year General Mathematics*—Include here other topics in algebra and statistics emphasized in the first year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)
11.11 02 00 00	**Second-year General Mathematics**—(For description of the subject matter select from the following topics.)
11.11 02 01 00	ARITHMETIC—The following topics in arithmetic are frequently included in general mathematics:
11.11 02 01 01	Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers
11.11 02 01 02	Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying
11.11 02 01 03	Elementary number theory: primes, factors, and composites
11.11 02 01 99	*Other Arithmetic Topics in Second-year General Mathematics*—Include here other topics in arithmetic emphasized in the second year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not listed above or under *Mathematics (7th and 8th grades)*. (Specify.)
11.11 02 02 00	GEOMETRY—Topics in geometry studied in general mathematics frequently include:
11.11 02 02 01	Measurement such as angular, area, length, and volume
11.11 02 02 02	Use of instruments such as the straightedge, compass, and protractor for construction of geometric figures
11.11 02 02 03	Calculation of perimeter, area, and volume
11.11 02 02 04	Construction of models: two-dimensional, three-dimensional
11.11 02 02 05	Indirect measurement including scale drawing, similar triangles, and numerical trigonometry
11.11 02 02 06	The Pythagorean rule and its application
11.11 02 02 99	*Other Geometry Topics in Second-year General Mathematics*—Include here other topics in geometry emphasized in the second year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)
11.11 02 03 00	ALGEBRA AND STATISTICS—Topics in algebra and statistics studied in general mathematics frequently include:
11.11 02 03 01	Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities
11.11 02 03 02	Ratio and proportions, trigonometry of the right triangle
11.11 02 03 03	Calculation of mean, median, and mode
11.11 02 03 04	Statistical graphs
11.11 02 03 05	Informal numerical probability
11.11 02 03 99	*Other Algebra and Statistics Topics in Second-year General Mathematics*—Include here other topics in algebra and statistics emphasized in the second year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)
11.11 03 00 00	**Third-year General Mathematics**—(For description of the subject matter select from the following topics.)
11.11 03 01 00	ARITHMETIC—The following topics in arithmetic are frequently included in general mathematics:

11.11 03 01 01	Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers
11.11 03 01 02	Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying
11.11 03 01 03	Elementary number theory: primes, factors, and composites
11.11 03 01 99	*Other Arithmetic Topics in Third-year General Mathematics*—Include here other topics in arithmetic emphasized in the third year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics* (*7th and 8th grades*), or which are not listed above or under *Mathematics* (*7th and 8th grades*). (Specify.)
11.11 03 02 00	GEOMETRY—Topics in geometry studied in general mathematics frequently include:
11.11 03 02 01	Measurement such as angular, area, length, and volume
11.11 03 02 02	Use of instruments such as the straightedge, compass, and protractor for construction of geometric figures
11.11 03 02 03	Calculation of perimeter, area, and volume
11.11 03 02 04	Construction of models: two-dimensional, three-dimensional
11.11 03 02 05	Indirect measurement including scale drawing, similar triangles, and numerical trigonometry
11.11 03 02 06	The Pythagorean rule and its application
11.11 03 02 99	*Other Geometry Topics in Third-year General Mathematics*—Include here other topics in geometry emphasized in the third year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics* (*7th and 8th grades*), or which are not included in either of these lists or above. (Specify.)
11.11 03 03 00	ALGEBRA AND STATISTICS—Topics in algebra and statistics studied in general mathematics frequently include:
11.11 03 03 01	Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities
11.11 03 03 02	Ratio and proportions; trigonometry of the right triangle
11.11 03 03 03	Calculation of mean, median, and mode
11.11 03 03 04	Statistical graphs
11.11 03 03 05	Informal numerical probability
11.11 03 03 99	*Other Algebra and Statistics Topics in Third-year General Mathematics*—Include here other topics in algebra and statistics emphasized in the third year of general mathematics which may be identified under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics* (*7th and 8th grades*), or which are not included in these lists or above. (Specify.)
11.11 04 00 00	**Fourth-year General Mathematics**—(For description of the subject matter select from the following topics.)
11.11 04 01 00	ARITHMETIC—The following topics in arithmetic are frequently included in general mathematics:
11.11 04 01 01	Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers
11.11 04 01 02	Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying
11.11 04 01 03	Elementary number theory: primes, factors, and composites
11.11 04 01 99	*Other Arithmetic Topics in Fourth-year General Mathematics*—Include here other topics in arithmetic emphasized in the fourth year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics* (*7th and 8th grades*), or which are not listed above or under *Mathematics* (*7th and 8th grades*). (Specify.)
11.11 04 02 00	GEOMETRY—Topics in geometry studied in general mathematics frequently include:
11.11 04 02 01	Measurement such as angular, area, length, and volume
11.11 04 02 02	Use of instruments such as the straightedge, compass, and protractor for construction of geometric figures
11.11 04 02 03	Calculation of perimeter, area, and volume
11.11 04 02 04	Construction of models: two-dimensional, three-dimensional
11.11 04 02 05	Indirect measurement including scale drawing, similar triangles, and numerical trigonometry
11.11 04 02 06	The Pythagorean rule and its application
11.11 04 02 99	*Other Geometry Topics in Fourth-year General Mathematics*—Include here other topics in geometry emphasized in the fourth year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics* (*7th and 8th grades*), or which are not included in either of these lists or above. (Specify.)
11.11 04 03 00	ALGEBRA AND STATISTICS—Topics in algebra and statistics studied in general mathematics frequently include:
11.11 04 03 01	Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities
11.11 04 03 02	Ratio and proportion; trigonometry of the right triangle
11.11 04 03 03	Calculation of mean, median, and mode
11.11 04 03 04	Statistical graphs
11.11 04 03 05	Informal numerical probability
11.11 04 03 99	*Other Algebra and Statistics Topics in Fourth-year General Mathematics*—Include here other topics in algebra and statistics emphasized in the fourth year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under

11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)

11.12 00 00 00	**GEOMETRY** The branch of mathematics in which the subject matter is designed to provide opportunities for pupils to (1) acquire information about geometric figures in the plane and in space, (2) gain understanding of the deductive method of thinking, (3) develop skill in applying the deductive method to mathematical situations, and (4) develop creative thinking by means of original exercises involving both the discovery of relationships and their proofs. Geometry is the subject matter of mathematics which emphasizes the use of logic in establishing proofs concerned with relationships involving points and lines in two- and three-dimensional space. The following topics are usually included for study in geometry. (Topics selected from the following list, as well as topics not listed below, may serve to describe the instructional subject matter of geometry—plane geometry, solid geometry, plane and solid geometry (integrated), and other geometry.)
11.12 00 01 00	Properties of common geometric figures: (a) in the plane, and (b) in space
11.12 00 02 00	The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic
11.12 00 03 00	Statement and proof of conjectures involving geometric relationships
11.12 00 04 00	Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids
11.12 00 05 00	Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems
11.12 00 06 00	Constructions with ruler and compasses; proofs
11.12 00 07 00	Geometric drawing in two and three dimensions
11.12 00 08 00	Geometric measurement: linear, angular, surface, and space
11.12 00 09 00	Coordinate geometry in (a) the plane, and (b) space
11.12 00 10 00	Simple trigonometric relationships of the right triangle
11.12 00 11 00	Consideration of the existence of non-Euclidean geometries
11.12 00 99 00	OTHER TOPICS IN GEOMETRY—Include here other topics emphasized in geometry which are not listed above. (Specify.)
11.12 01 00 00	**Analytic Geometry—**The study of plane and solid Euclidean geometry by means of coordinate systems and the associated representations of geometric objects by algebraic ones. The following topics usually are included for study:
11.12 01 01 00	The Euclidean plane and the Cartesian plane
11.12 01 02 00	Line segments, slopes, angles, length, and area
11.12 01 03 00	Equations and properties of lines
11.12 01 04 00	Geometric and algebraic invariance—the idea of analytic proof of geometric theorems
11.12 01 05 00	Loci in the plane, including circles
11.12 01 06 00	Graphs, symmetries, reflections, and tangents
11.12 01 07 00	Conics (ellipse, parabola, hyperbola)
11.12 01 08 00	Polar coordinate and loci
11.12 01 09 00	Parametric representations—higher plane and space curves
11.12 01 10 00	Vector methods; projection
11.12 01 99 00	OTHER TOPICS IN ANALYTIC GEOMETRY—Include here other topics emphasized in analytic geometry which are not listed above. (The more advanced topics may include differential geometry applying calculus to analytic geometry and analytic non-Euclidean geometries such as the geometry to the sphere or of special relativity.) (Specify.)
11.12 02 00 00	**Plane Geometry—**(For description of the subject matter select from the following topics.)
11.12 02 01 00	Properties of common geometric figures: (a) in the plane, and (b) in space
11.12 02 02 00	The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic
11.12 02 03 00	Statement and proof of conjectures involving geometric relationships
11.12 02 04 00	Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids
11.12 02 05 00	Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems
11.12 02 06 00	Constructions with ruler and compasses; proofs
11.12 02 07 00	Geometric drawing in two and three dimensions
11.12 02 08 00	Geometric measurement: linear, angular, surface, and space
11.12 02 09 00	Coordinate geometry in (a) the plane, and (b) space
11.12 02 10 00	Simple trigonometric relationships of the right triangle
11.12 02 11 00	Consideration of the existence of non-Euclidean geometries
11.12 02 99 00	OTHER TOPICS IN PLANE GEOMETRY—Include here other topics emphasized in plane geometry which are not listed above. (Specify.)
11.12 03 00 00	**Plane and Solid Geometry—**(For description of the subject matter select from the following topics.)
11.12 03 01 00	Properties of common geometric figures: (a) in the plane, and (b) in space
11.12 03 02 00	The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic
11.12 03 03 00	Statement and proof of conjectures involving geometric relationships
11.12 03 04 00	Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids
11.12 03 05 00	Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems

11 MATHEMATICS—Continued

11.12 03 06 00	Constructions with ruler and compasses; proofs
11.12 03 07 00	Geometric drawing in two and three dimensions
11.12 03 08 00	Geometric measurement: linear, angular, surface, and space
11.12 03 09 00	Coordinate geometry in (a) the plane, and (b) space
11.12 03 10 00	Simple trigonometric relationships of the right triangle
11.12 03 11 00	Consideration of the existence of non-Euclidean geometries
11.12 03 99 00	OTHER TOPICS IN PLANE AND SOLID GEOMETRY—Include here other topics emphasized in plane and solid geometry which are not listed above. (Specify.)
11.12 04 00 00	**Solid Geometry**—(For description of the subject matter select from the following topics.)
11.12 04 01 00	Properties of common geometric figures: (a) in the plane, and (b) in space
11.12 04 02 00	The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic
11.12 04 03 00	Statement and proof of conjectures involving geometric relationships
11.12 04 04 00	Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids
11.12 04 05 00	Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems
11.12 04 06 00	Constructions with ruler and compasses; proofs
11.12 04 07 00	Geometric drawing in two and three dimensions
11.12 04 08 00	Geometric measurement: linear, angular, surface, and space
11.12 04 09 00	Coordinate geometry in (a) the plane and (b) space
11.12 04 10 00	Simple trigonometric relationships of the right triangle
11.12 04 11 00	Consideration of the existence of non-Euclidean geometries
11.12 04 99 00	OTHER TOPICS IN SOLID GEOMETRY—Include here other topics emphasized in solid geometry which are not listed above (Specify.)
11.12 99 00 00	**Other Geometry**—Include here other organized subject matter emphasized in geometry not classifiable or listed above. (Specify.)
11.13 00 00 00	**INTRODUCTION TO ANALYSIS** The learning experiences and subject matter concerned with selected aspects of algebra, trigonometry, and analytic geometry which are organized into an integrated body of content. In practice, the concept of a limit and the functions of real numbers are emphasized. The following topics in mathematics are usually included in the introduction to analysis:
11.13 00 01 00	The algebra of real numbers
11.13 00 02 00	Coordinates of a point in a plane
11.13 00 03 00	Lines and planes in space
11.13 00 04 00	Vectors and complex numbers
11.13 00 05 00	Limits, including the derivative and the concept of an integral
11.13 00 06 00	Polynomials
11.13 00 07 00	The conic sections
11.13 00 08 00	Periodic functions
11.13 00 09 00	Exponentials and logarithmic functions
11.13 00 99 00	OTHER TOPICS IN INTRODUCTION TO ANALYSIS—Include here other topics emphasized in introduction to analysis which are not listed above. (Specify.)
11.14 00 00 00	**LIBERAL ARTS MATHEMATICS** An organization of subject matter concerned with the cultural relevance and meaning of mathematics designed for pupils for whom technical mathematics is inappropriate. Sometimes this is a full-year course for elementary teachers; but frequently the course for elementary teachers is separate and more specialized. Usually, the subject matter of liberal arts mathematics is not designed to comprise a part of a sequential prerequisite for calculus, or science, or engineering courses. The subject matter is not standard, but is usually chosen to illustrate the role of mathematics in the development of western civilization, the philosophy and the nature of mathematics, and the relation of mathematics to logic. Often miniature deductive geometries of algebraic systems of novel subject matter are included. Material from number theory has been found to be interesting and to require a minimum of technique. Some stochastic models are usually introduced for contrast with deterministic ones. The number system and its history was formerly considered good material for this course but recently has come to be regarded as inappropriate because pupils regard it as familiar to the point of contempt.
11.15 00 00 00	**PROBABILITY AND STATISTICS** The study of the first semester of calculus with analytic geometry is frequently required as prerequisite to the study of probability and statistics. The following topics are usually included in probability and statistics: (The study of topics identified with an asterisk (*) is dependent on the first semester of calculus with analytic geometry.)
11.15 00 01 00	Sample spaces; events as subsets
11.15 00 02 00	Probability axioms
11.15 00 03 00	Finite sample spaces and equiprobable measures
11.15 00 04 00	Counting and binomial coefficients
11.15 00 05 00	Conditional probability and independent events
11.15 00 06 00	Random variables
11.15 00 07 00	Density and distribution functions
11.15 00 08 00	Special distributions: binomial, hypergeometric, Poisson*, uniform, normal*, and exponential*
11.15 00 09 00	Limit theorems*: Poisson* and normal approximations*, law of large numbers, and Central Limit Theorem*
11.15 00 10 00	Descriptive statistics: means, variances, and moments
11.15 00 11 00	Statistical inference: estimation and sampling
11.15 00 12 00	Hypothesis testing; regression
11.15 00 99 00	OTHER TOPICS IN PROBABILITY AND STATISTICS—Include here other topics emphasized in probability and statistics which are not listed above. (Specify.)

11 MATHEMATICS—Continued

11.16 00 00 00	**TRIGONOMETRY** The study of trigonometric ratios and the circular functions—their relationships, graphs, and applications. Problem solving is emphasized throughout the subject matter. In practice, the following topics in trigonometry usually are included for study:
11.16 00 01 00	Right-triangle trigonometry
11.16 00 02 00	Oblique-triangle trigonometry
11.16 00 03 00	Construction and use of trigonometric tables
11.16 00 04 00	Unit circle, the winding function, and periodicity
11.16 00 05 00	Trigonometric functions of real numbers; radians
11.16 00 06 00	Graphs of trigonometric functions
11.16 00 07 00	Inverse trigonometric functions and their graphs
11.16 00 08 00	Special formulas
11.16 00 09 00	Trigonometric identities and conditional equations
11.16 00 10 00	Complex numbers; vectors
11.16 00 11 00	Polar representations
11.16 00 99 00	Other Topics in Trigonometry—Include here other topics emphasized in trigonometry which are not listed above. (Specify.)
11.99 00 00 00	**OTHER MATHEMATICS** Include here other organized subject matter emphasized in mathematics which is not listed or classifiable above. (Specify.)

MUSIC

12.00 00 00 00

Music is the fine art that utilizes sounds in time in a meaningful and organized manner. Subject matter and activities in music are designed to impart the skills and knowledge necessary for the understanding, appreciation, creation, performance, and enjoyment of music.

The Ad Hoc Committee for Music applied the following rationale to the selection of the items for placement in the Music area: (1) the various items selected and classified were determined by consensus of the committee to include the aspects of music most commonly taught in the United States; (2) the various aspects of subject matter selected for classification could be defined in brief form using only salient descriptive elements; and (3) the items were identifiable by titles which were considered to be most commonly used in current practice in music.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of music as an integral part of the instructional program. As an example, the Music Club provides additional opportunities to explore interests, apply various acquired skills, increase knowledge about different aspects of music, and develop appreciation for music in our culture. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Music Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 21 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify the various subjects in the music area.

12.01 00 00 00	**MUSIC (GENERAL EDUCATION)** Organized subject matter and musical experiences consisting of an extensive and varied study of music designed for all pupils. The purpose of these music experiences is to provide basic education in music similar to that in other subject areas necessary to general cultural development. Through participation and study, pupils develop basic musical skills and gain insights into the art of music.
12.02 00 00 00	**MUSIC LITERATURE AND/OR HISTORY** Organized subject matter and learning experiences designed to further pupils' knowledge, comprehension, and appreciation of various types and styles of music.
12.03 00 00 00	**MUSIC THEORY** The study of principles of music, including rudiments, harmony, counterpoint, form and analysis, and orchestration; skills such as sight singing, ear training, and conducting; and composition. In practice, the various aspects of music theory may be organized into more specific bodies of subject matter for instruction such as the following:
12.03 01 00 00	**Fundamentals**
12.03 02 00 00	**Harmony**
12.03 99 00 00	**Other Music Theory**—Include here other organized subject matter and experiences emphasized in music theory which are not listed above. (Specify.)
12.04 00 00 00	**VOCAL MUSIC** Learning experiences designed for the study of vocal repertoire and the development of vocal skills through solo and choral performance. Subject matter is organized to provide for instruction in a variety of situations such as:
12.04 01 00 00	**Choir, Chorus, and/or Glee Club**—A large ensemble of pupils organized to study, rehearse, and perform choral literature in various combinations. This musical experience provides opportunities for the pupil to gain knowledge and understanding and to develop skills through performance in groups such as the following:
12.04 01 01 00	Female
12.04 01 02 00	Male
12.04 01 03 00	Mixed
12.04 02 00 00	**Vocal Instruction**—Instruction designed for developing skills and knowledge in vocal

12 MUSIC—Continued

performance in situations such as the following:

12.04 02 01 00 GROUP

12.04 02 02 00 INDIVIDUAL

12.04 03 00 00 **Small Vocal Ensembles**—A vocal chamber group such as a trio, quartet, octet, and/or madrigal ensemble that offers opportunities not available in larger groups.

12.04 99 00 00 **Other Vocal Music**—Include here other organized subject matter and learning experiences emphasized in vocal music which are not listed above. (Specify.)

12.05 00 00 00 **INSTRUMENTAL MUSIC**

Learning experiences designed for the study of instrumental repertoire and the development of instrumental skills through solo and group performance. Subject matter is organized to provide for instruction in a variety of situations such as:

12.05 01 00 00 **Band**—An ensemble of wind and percussion players organized to study, rehearse, and perform the repertoire for this medium. Among the different classifications of bands, depending upon size, repertoire, and function, are the following which are organized for instruction:

12.05 01 01 00 CONCERT

12.05 01 02 00 MARCHING

12.05 01 03 00 STAGE

12.05 01 99 00 OTHER BAND—Include here other organized subject matter and experiences emphasized in band which are not listed above. (Specify.)

12.05 02 00 00 **Orchestra**—An ensemble of string, wind, and percussion players organized to study, rehearse, and perform the repertoire for this medium. Among the different combinations of orchestras, depending upon size, repertoire, and function, are the following which are organized for instruction:

12.05 02 01 00 CHAMBER

12.05 02 02 00 FULL

12.05 02 03 00 STRING

12.05 02 99 00 OTHER ORCHESTRA—Include here other organized subject matter and experiences emphasized in orchestra which are not listed above. (Specify.)

12.05 03 00 00 **Small Instrumental Ensembles**—An instrumental chamber group such as a trio, quartet, or quintet that offers opportunities not available in larger groups.

12.05 04 00 00 **Instrumental Instruction**—Instruction designed for developing skills and knowledge in instrumental performance in situations such as the following:

12.05 04 01 00 GROUP

12.05 04 02 00 INDIVIDUAL

12.05 99 00 00 **Other Instrumental Music**—Include here other organized subject matter and experiences emphasized in instrumental music which are not listed above. (Specify.)

12.06 00 00 00 **RHYTHM AND BODY MOVEMENT**

(For definition see 08.03 04 02 00 *Rhythms* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

12.07 00 00 00 **HUMANITIES**

The study of a group of related subjects such as art, literature, music, religion, history, philosophy, and classical and modern foreign languages—with music usually forming the core—concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject-matter areas are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

12.99 00 00 00 **OTHER MUSIC**

Include here other organized subject matter and experiences emphasized in music which are not listed or classifiable under one of the major categories above. (Specify.)

NATURAL SCIENCES
13.00 00 00 00

The natural sciences include the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with knowledge of the physical and biological world, and of the processes of discovering and validating this knowledge.

The Ad Hoc Committee for Natural Sciences applied the following rationale to the selection of substantive content for placement in the Natural Sciences area: (1) the items selected and classified were determined by the committee as representing the subject matter most commonly taught in natural sciences in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of natural sciences as an integral part of the instructional program. As an example, the Science Club provides additional opportunities to pursue personal interests, apply various acquired skills, increase knowledge in selected aspects of science, and develop leadership qualities through club activities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Science Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 28 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various aspects of the natural sciences.

13.01 00 00 00	**GENERAL SCIENCE (INCLUDING ELEMENTARY SCHOOL SCIENCE)** An organization of subject matter which usually includes representative topics from the biological, physical, and earth-space sciences. Learning experiences involve pupils in observing, exploring, discovering, and experimenting for purposes of achieving understanding of how scientists work and what they know about the universe. General science is primarily studied in elementary and junior high schools, but similar courses with titles such as Comprehensive Science or Survey of Sciences are offered at the senior high school or junior college level. If desired, the subject matter of instruction in general science may be described in greater detail through the use of the appropriate topic titles included in items 13.02 00 01 00–13.02 00 24 00, 13.03 00 01 00–13.03 00 34 00, and 13.04 00 01 00–13.04 00 19 00.
13.02 00 00 00	**BIOLOGICAL SCIENCES (INCLUDING GENERAL BIOLOGY)** The environments, interrelationships, processes, classification, evolution, and structure and function of living organisms—plants, protists, and animals.
13.02 01 00 00	**Botany—**The study of plants.
13.02 02 00 00	**Microbiology—**The study of bacteria, viruses, algae, fungi, and other monera and protista.
13.02 03 00 00	**Zoology—**The study of animals.
13.02 99 00 00	**Other Biological Sciences—**Include here other biological sciences which are emphasized in instruction and are not listed above. (Specify.)
	MAJOR ASPECTS OF THE BIOLOGICAL SCIENCES:
13.02 00 01 00	Anatomy—The branch of biology that relates to the structure of a living organism or any of its parts.
13.02 00 02 00	Anthropology—The science of man, both physical and cultural, and the relationship of man to his cultural environment and to the societies in which he groups himself. (See also 15.01 06 00 00 *Physical Anthropology* under SOCIAL SCIENCES/SOCIAL STUDIES.)
13.02 00 03 00	Bacteriology—The science which deals with the study of microorganisms and their effects on other organisms. This may include such topics as viruses, fungi, aerobic and anaerobic bacteria, antitoxins, antibiotics, antigens, and bacteriophage.
13.02 00 04 00	Behavior—The science which deals with the ways in which an organism responds to stimili, its activity or change in relation to the environment, conditioning tropisms, irritability, and innate and learned behavior.
13.02 00 05 00	Biochemistry—The branch of chemistry that deals with plants and animals and their life processes.
13.02 00 06 00	Biometrics—The science of measurement and statistics as used in connection with plants and animals.
13.02 00 07 00	Biophysics—The application of physical principles and methods to biological organisms and their processes.
13.02 00 08 00	Cellular Phenomena (Cytology)—The area of biology which considers the cell as a unit of organization in plants and animals and gives consideration to the structure, function, pathology, and life history of cells.
13.02 00 09 00	Conservation (Environment)—The science concerned with the development, protection, use, and management of all our resources for the needs and enjoyment of all the people. Emphasis in instruction may be on natural or human resources, or both.
13.02 00 10 00	Developmental Biology—Those processes and events in development which relate to or include growth, cellular differentiation and morphogenesis.
13.02 00 11 00	Ecology—The study of natural mutual relationships between organisms and all factors comprising their environment.
13.02 00 12 00	Entomology—The science that deals with all knowledge pertaining to insects.
13.02 00 13 00	Evolution—The study of the processes and changes by which any living organism acquires the morphological and physiological characteristics which distinguish it from other living things.
13.02 00 14 00	Genetics—The study of the production and development of varieties by the transmission of traits from parents to offspring. Aspects of this study include trait inheritance, variation, and genetic code.
13.02 00 15 00	Molecular Biology—The area of biology which considers the living organism at the molecular level and gives consideration to such topics as molecular structure and process, metabolic energy, respiration, photosynthesis, DNA and RNA.
13.02 00 16 00	Nature Study—The consideration of objects, organisms, and their environment and behavior in nature.
13.02 00 17 00	Nutrition—The study of biochemical and physiological processes by which plants and animals take in, absorb, and transport food substances for promoting growth and other body functions.
13.02 00 18 00	Organic Systems—The study of systems essential to life processes, such as the circulatory, respiratory, digestive, excretory, nervous, skeletal, and reproductive systems.
13.02 00 19 00	Origins of Life—The study of the phyletic origins of present day forms of life from previously existing forms.
13.02 00 20 00	Physiology—The branch of biology that relates to the functions of living organisms or any of their parts.
13.02 00 21 00	Reproduction—The study of the process by which plants and animals give rise to offspring by either asexual or sexual means.
13.02 00 22 00	Taxonomy—The study of the science which considers the nomenclature and classification of living organisms and the logic and method of such classification.
13.02 00 23 00	Technological Applications—The study of aspects of the biological science, as oriented to the needs of individuals

	industries, or government; this includes applications in research, production, and human welfare.
13.02 00 99 00	**Other Major Aspects of the Biological Sciences**—Include here other major aspects of the biological sciences which are emphasized in instruction and are not listed above. (Specify.)
13.03 00 00 00	**PHYSICAL SCIENCES (INCLUDING GENERAL PHYSICAL SCIENCE)** The organization of subject matter that usually includes for study the major topics, concepts, processes, and interrelationships of chemistry and physics. Considerations may sometimes be given to topics which are included under the earth-space sciences, such as geology and astronomy.
13.03 01 00 00	**Chemistry**—The study of the composition structure, and properties of matter, and of changes in matter, including the accompanying energy phenomena.
13.03 02 00 00	**Physics**—The study of the branch of science that is concerned with matter and energy, including the study of phenomena associated with mechanics, heat, wave motion, sound, electricity and magnetism, light, and atomic and nuclear structure.
13.03 99 00 00	**Other Physical Sciences**—Include here other physical sciences (not including "earthspace sciences") which are emphasized ininstruction and are not listed above. (Specify.)
	MAJOR ASPECTS OF THE PHYSICAL SCIENCES:
13.03 00 01 00	**Astronomy**—(For definition see 13.04 01 00 00 *Astronomy* under Earth-Space Sciences.)
13.03 00 02 00	**Atomic and Molecular Structure**—The study of such areas as the atomicity of matter, the structure of atoms and molecules, and atomic and molecular spectra.
13.03 00 03 00	**Biochemistry**—(For definition see 13.02 00 05 00 *Biochemistry* under Biological Sciences.)
13.03 00 04 00	**Biophysics**—(For definition see 13.02 00 07 00 *Biophysics* under Biological Sciences.)
13.03 00 05 00	**Chemical Bonding**—The study of the bonding among atoms in ions and molecules: types, lengths, and strengths of bonds; geometry of molecules, relationships of bonds to the physical and chemical properties of substances and energy considerations.
13.03 00 06 00	**Chemical Calculations**— The quantitative treatment of chemical reactions and solution phenomena such as manipulation of units in solving problems, uncertainty, significant figures, and use of the slide rule.
13.03 00 07 00	**Chemical Reactions**—The study of chemical changes, including topics such as formulas, equations, oxidation-reduction, equilibrium conditions, rates of reaction and energy effects.
13.03 00 08 00	**Electricity and Magnetism**—The study of static and moving electric charges, electric and magnetic fields, electric circuits (direct- and/or alternating-current phenomena) and electromagnetic effects.
13.03 00 09 00	**Electronics**—The study of such topics as the controlled flow of charged particles through a gas, vacuum, or crystal lattice, thermionic emission, amplification, rectification, light-sensitive devices and indicators (e.g., cathode ray tubes), television, semiconductors and transistors.
13.03 00 10 00	**Equilibrium**—The study of factors affecting the extent of a chemical reaction such as the dynamic nature of the equilibrium condition, equilibrium constants, free energy, and Le Chatelier's principle.
13.03 00 11 00	**Geology**—(For definition see 13.04 02 00 00 *Geology* under Earth-Space Sciences.)
13.03 00 12 00	**Heat**—The study of this form of energy in relation to changes of state, temperature, gas laws, molecular motion, and thermodynamic laws.
13.03 00 13 00	**Inorganic Chemistry**—The study of the chemistry of noncarbon compounds.
13.03 00 14 00	**Kinetic Molecular Theory**—The study of heat and pressure phenomena based on the motions and collisions of atoms and molecules, temperature, gas laws, energy equivalences, and conservation.
13.03 00 15 00	**Materials Science**—The study of the structure, reactions, functions, and synthesis of alloys, ceramics, and plastics.
13.03 00 16 00	**Measurement**—Includes the study of units, instruments, limits of errors, comprehension of scale, and statistical analysis associated with the comparison of some physical characteristic with an accepted standard.
13.03 00 17 00	**Mechanics**—The study of forces and their relation to the motion of bodies: Newton's Laws, conservation principles, energy and momentum, machines, and forces in fluids.
13.03 00 18 00	**Meteorology**—(For definition see 13.04 03 00 00 *Meteorology* under Earth-Space Sciences.)
13.03 00 19 00	**Nuclear Science**—The study of areas such as the structure of the nucleus, radioactivity, energy-mass equivalence, radiation detection and measurement, and energy effects produced when nuclear particles are disturbed by external forces.
13.03 00 20 00	**Oceanography**—(For definition see 13.04 04 00 00 *Oceanography* under Earth-Space Sciences.)
13.03 00 21 00	**Optics**—The study of the nature and propagation of light and other electromagnetic radiations, wave characteristics, geometrical optics (mirrors and lenses), color, and vision.
13.03 00 22 00	**Organic Chemistry**—The study of the chemistry of carbon compounds—their properties, chemical behavior, preparation, and uses.
13.03 00 23 00	**Periodic Properties**—The study of the periodicity in the properties of elements and relationship to atomic structure.
13.03 00 24 00	**Physical Chemistry**—The study of the application of physical principles to chemical systems; gas laws, thermodynamics, kinetics, solubility phenomena, and equilibrium.
13.03 00 25 00	**Qualitative Analysis**—The branch of chemistry concerned with the detection or identification of a substance (element,

	ion, or compound) by nonquantitative tests.
13.03 00 26 00	Quantitative Analysis—The branch of chemistry concerned with the determination of the amount of a substance (element, ion, or compound) by quantitative tests.
13.03 00 27 00	Quantum Mechanics—Includes the study of the behavior of electrons and nucleons, the duality of energy and matter (wave and particle models), relativity, statistical and wave mechanics, and all aspects of quantum theory.
13.03 00 28 00	Solid State Physics—The study of the structure and properties of solids such as crystals, alloys, semiconductors, superconductors, and plastics; this includes theoretical aspects of transistors, lasers, and ceramic devices.
13.03 00 29 00	Solution Phenomena—The study of the general behavior of solutions, solubility, ionization, acids-bases-salts, electrochemistry, hydrolysis, and concentration (molarity, normality).
13.03 00 30 00	Sound—The study of the sources and wave characteristics of sound, perception (hearing), accoustical treatments, and music.
13.03 00 31 00	Stoichiometry—The study of energy and material balances in chemical systems, multiple and definite proportions, and balancing equations.
13.03 00 32 00	Technological Applications—The study of aspects of the physical sciences as oriented to the needs of individuals, industries, or government; this includes applications in research, production, and human welfare.
13.03 00 33 00	Thermodynamics—The study of energy changes in physical and chemical systems; in physics, the interrelationships of heat and mechanical energy; and in chemistry, the relationship of heat to chemical reactions.
13.03 00 34 00	Wave Phenomena—The study of general characteristics of periodic wave motion (length, frequency, velocity, amplitude, energy transfer, reflection, refraction, interference, diffraction...) with emphasis on similarities of different types of waves (light, sound).
13.03 00 99 00	Other Major Aspects of the Physical Sciences—Include here other major aspects of the physical sciences which are emphasized in instruction and are not listed above. (Specify.)
13.04 00 00 00	**EARTH-SPACE SCIENCES (INCLUDING GENERAL EARTH-SPACE SCIENCE)** Facts, concepts, and principles of geology, astronomy, meteorology, oceanography, and space exploration which are interrelated in the study of the natural environment of both earth and space.
13.04 01 00 00	**Astronomy**—The study of matter and energy in the universe. This includes the solar system, stars, galaxies, nebulae, and other extragalactic phenomena. The instruments used for study and the related mathematics are important aspects of astronomy.
13.04 02 00 00	**Geology**—The study of the composition, structure, and history of the earth and of earth processes. Content areas such as mineralogy, petrology, structural geology, physiography, paleontology, historical geology, and economic geology may be included.
13.04 03 00 00	**Meteorology**—The science of the atmosphere and all of the aspects of matter-energy exchange. It involves the study of weather and climate, including humidity, temperature, atmospheric pressure, air masses and motion, clouds, precipitation, and interrelationships on both local and global scales.
13.04 04 00 00	**Oceanography**—The study of the oceans and other large bodies of water. Oceanography, which draws heavily from physics, chemistry, marine biology, and geology, is concerned with processes, compositional features, the interactions with the atmosphere and lithosphere, and biological interrelationships.
13.04 05 00 00	**Space Exploration**—The science of spacecraft, propulsion systems, launching, orbiting, rendezvous, spaceflight, solar-system destinations, and biological effects on man or other organisms.
13.04 99 00 00	**Other Earth-Space Sciences**—Include here other earth-space sciences which are emphasized in instruction and are not listed above. (Specify.)
	MAJOR ASPECTS OF THE EARTH-SPACE SCIENCES:
13.04 00 01 00	Aeronautics—The study of the structure and flight of aircraft—aviation.
13.04 00 02 00	Astronautics—The study of the problems associated with travel in space.
13.04 00 03 00	Biological Interrelationships—The study of the interactions between an organism and its environment as evidenced in paleontology, exobiology, marine biology, and ecology.
13.04 00 04 00	Climatology—The study of climates, their causes and effects over long time periods, and on regional or global scales.
13.04 00 05 00	Cosmology—The study of the principles, theories, and philosophy concerned with the nature of the universe as a whole, including its origin and evolution.
13.04 00 06 00	Earth Changes—The study of the changes through geologic time (evolution), and the change in short periods of time, such as erosion, weathering, volcanic eruptions, and earthquakes.
13.04 00 07 00	Forces and Motion—The study of gravitational, electromagnetic, and nuclear actions which result in various natural events such as air and ocean currents, planetary motion, tides, seasons, and the thermonuclear reactions of the stars.
13.04 00 08 00	Geochemistry—The study of the chemical composition, structure, and reactions of earth materials.
13.04 00 09 00	Geophysics—The study of the physics of the earth and its environment in space, including phenomena such as fields and forces, mass and motion, time and space, and matter and energy.
13.04 00 10 00	Hydrology—The study of water, including its various forms and properties; its distribution in oceans, lakes, streams, underground formations, glaciers, and in the atmosphere; and the hydrologic cycle.

13 NATURAL SCIENCES—Continued

13.04 00 11 00	**Instrumention and Analytical Methods**—The study of the instruments and techniques used to gather observations may be supplemented through the use of instruments such as spectroscopes, telescopes, seismographs, microscopes, weather balloons, satellites, and sonar.
13.04 00 12 00	**Levels of Organization**—The study concerned with systems of grouping and levels of complexity and magnitude of earth phenomena such as atoms, air masses, galaxies, minerals, rocks, and mountains, and scale and complexity.
13.04 00 13 00	**Matter-energy Exchange**—The study of the conservation of mass and energy and the exchange of these across the boundaries (interfaces) between lithosphere, hydrosphere, and atmosphere.
13.04 00 14 00	**Measurement**—(For definition see 13.03 00 16 00 *Measurement* under Physical Sciences.)
13.04 00 15 00	**Paleontology**—The study of prehistoric forms of life such as plant and animal fossils.
13.04 00 16 00	**Physical Geography**—The study, description, and mapping of surface phenomena of the earth.
13.04 00 17 00	**Soil Science**—The study of the formation, classification, mapping, and the physical, chemical, biological, and fertility properties of soils.
13.04 00 18 00	**Uniformitarianism**—The study of existing processes as a key to understanding the past, based on the theoretical uniformity of all geologic processes throughout all time.
13.04 00 19 00	**Technological Applications**—The study of aspects of the earth-space sciences as oriented to the needs of individuals, industries, or government; this includes applications in research, production, and human welfare.
13.04 00 99 00	**Other Major Aspects of the Earth-Space Sciences**—Include here other major aspects of the earth-space sciences which are emphasized in instruction and are not listed above. (Specify.)

OFFICE OCCUPATIONS

14.00 00 00 00

This body of subject matter, or combinations of courses and practical experience, is organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected office occupations. In the instructional process various aspects of subject matter frequently are drawn from other subject-matter areas. Learning experiences are designed to lead to employment and/or advancement of individuals in occupations in public or private enterprises or organizations related to the facilitating function of the office. "Facilitating function," as used here refers to the expediting role played by office occupations as the connecting link between the production and distribution activities of an organization. Included is a variety of activities, such as recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and the reporting of information.

The Ad Hoc Committee for Office Occupations applied the following criteria to the selection of substantitive content for placement in the Office Occupations subject-matter area: (1) the content was determined by consensus of the committee to be unique and appropriate to office occupations in terms of the Vocational Education Act of 1963; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under Office Occupations were identifiable by titles which the *ad hoc* committee considered to be most appropriate to office occupations.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of office occupations as an integral part of the instructional program. As an example, the Office Education Association provides additional opportunities to develop leadership, other qualities, and an understanding of the world of work in office occupations. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups, and are an integral part of classwork. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242. As an illustration the Office Education Association is identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 25 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Under this heading are the items of information which identify categories of career objectives in office occupations, and around which courses and practical experiences are developed.

14.01 00 00 00 ACCOUNTING AND COMPUTING OCCUPATIONS

Planned learning experiences which include a combination of courses and practical experiences concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Junior Accountants, Bookkeepers, Cashiers, Machine Operators, Tellers, and Other Accounting and Computing Occupations. (See also the category 03.01 00 00 00 *Accounting*, and 03.03 06 00 00 *Payroll Record Keeping*, 03.08 00 00 00 *Business Finance*, 03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)

14.01 01 00 00 **Accountants**—Programs concerned with the paraprofessional duties supporting the accountant in organizing, designing, and controlling numerical and financial data. (D.O.T. No. 160. series)

14.01 02 00 00 **Bookkeepers**—Programs concerned with computing, classifying, and recording numerical data to keep financial records. (D.O.T. No. 210. series) (See also the category 03.03 00 00 00 *Bookkeeping* under BUSINESS.)

14.01 03 00 00 **Cashiers**—Programs concerned with receiving and disbursing money in establishments other than banks, and usually involving the use of machines, including cash registers and change makers. (D.O.T. No. 211. series)

14.01 04 00 00 **Machine Operators: Billing, Bookkeeping, and Computing**—Programs concerned with operations and procedures utilizing office machines for billing, posting, calculating, adding, listing, and mechanizing data (other than business data processing equipment). (D.O.T. Nos. 214., 215., 216., and 217. series) (See also 03.03 05 00 00 *Machine Bookkeeping* and the category 03.10 00 00 00 *Business Machines* under BUSINESS.)

14.01 05 00 00 **Tellers**—Programs concerned with disbursing and receiving money in a bank and recording the transactions. (D.O.T. No. 210. series)

14.01 99 00 00 **Other Accounting and Computing Occupations**—Programs concerned with computing and accounting office occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. No. 219. series) (Specify.)

14.02 00 00 00 BUSINESS DATA PROCESSING SYSTEMS OCCUPATIONS

Planned learning activities which include a combination of courses and practical experiences concerned with business data processing systems and operations. Career objectives are identified with various occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Computer and Console Operators, Peripheral Equipment Operators, Programmers, Systems Analysts, and other business data processing systems occupations. (See also 03.01 02 00 00 *Accounting Systems*, 03.01 05 00 00 *Cost Accounting*, 03.01 07 00 00 *Data Processing Accounting*, 03.12 00 00 00 *Business Statistics*, 03.17 00 00 00 *Data Processing and Computer Operation*, 03.17 01 00 00 *Introduction to Data Processing*, and 03.17 02 00 00 *Data Processing Systems* under BUSINESS.)

14.02 01 00 00 **Computer and Console Operators**—Programs concerned with the operation of an electronic data processing computer, including reviewing program instructions, determining procedures for a specific run, readying equipment for operation, and manipulating and monitoring controls during operation. When computer trouble develops and halts the computer operation the operator is responsible for seeking the source of the trouble. (D.O.T. No. 213. series) (See also 03.17 05 00 00 *Computer Operation: Introduction* under BUSINESS.)

14.02 02 00 00 **Peripheral Epuipment Operators**—Programs concerned with the operation of equipment which is auxiliary or peripheral to the operation of the electronic data computer. Included are the operations of card-to-tape converters, tape-to-card converters, high-speed printers, and related equipment. (D.O.T. No. 213. series) (See also 03.17 06 00 00 *Processing Equipment Operation*, 03.17 06 02 00 *Tabulating Equipment Operation*, and 03.17 06 03 00 *Tabulating Machine Wiring* under BUSINESS.)

14.02 02 01 00 KEY PUNCH AND CODING EQUIPMENT OPERATORS—Programs concerned with operating alphabetic/numeric key-punch machines for transcribing data from source materials and machines that print identification codes on wire, tape, plastic tubing, and other materials including installing specified type, code letters, and symbols in mandrels. (D.O.T. No. 213. series) (See also 03.17 06 01 00 *Punch Card Data Processing* under BUSINESS.)

14.02 02 99 00 OTHER PERIPHERAL EQUIPMENT OPERATORS—Programs concerned with peripheral equipment operations emphasized in instruction which are not classified above including emerging occupations in this category. D.O.T. Nos. 213. and 219. series) (Specify.)

14.02 03 00 00 **Programmers**—Programs concerned with converting symbolic statements of business problems to detailed logical flow charts for coding into computer language, including:

ANALYZING all or part of a workflow chart of diagram representing a business problem by applying knowledge of computer capabilities subject matter, algebra, and symbolic logic to develop the sequence of program steps;

CONFERRING with supervisors and representatives of departments concerned with programs to resolve questions of program intent, output requirements, input data acquisition, extent of automatic programming, coding and modification, and inclusions of interval checks and controls;

WRITING detailed logical flow charts in symbolic form to represent work order of data to be processed by a computer system, and to describe input, output, arithmetic, and logical operations involved;

CONVERTING detailed logical flow charts to language processible by computer;

DEVISING sample input data to provide testing of program adequacy;

PREPARING block diagrams to specify equipment configuration;

OBSERVING or operating a computer to test a coded program using actual or sample input data;

CORRECTING program errors by such methods as altering program steps and sequence;

PREPARING written instructions (run book) to guide operating personnel during production runs;

ANALYZING, revising and rewriting programs to increase operating efficiency or to adapt to new requirements;

COMPILING documentation of program development and subsequent revisions; and

SPECIALIZING, in some instances, in writing programs for one make and type of computer. (D.O.T. No. 020. series) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.) (Included as 16.04 01 00 00 *Computer Programmer* under TECHNICAL EDUCATION)

14.02 04 00 00 **Systems Analysts**—Programs concerned with analyzing and designing commercial systems, data methods, systems and procedures, and processing business data. Activities include analysis of business problems such as the development of integrated production, inventory control and cost, and the formulation and refinement of an analysis system for conversion to a programmable form for application to an electronic data processing system.

Activities frequently involve conferences with (1) the project director of business data processing and department heads of units involved to ascertain specific output requirements such as types of breakouts, degree of data summarization, and formats for management reports; and (2) management personnel of operating units to revise plans for obtaining and standardizing input data. (D.O.T. No. 012. series)

Among other responsibilities of the systems analyst are: the study of current or the development of new systems and procedures to devise workflow sequence; the analysis of alternative means of deriving input data to select the most feasible and economical method; and the development of process flow charts in outlines and detailed form for programming, indicating external verification points such as trial audit printouts. Responsibilities may also include directing the preparation of programs, but does not include major responsibilities for technical, scientific, or exotic mathematics applications. (D.O.T. No. 020. series) (Included as 16.04 02 00 00 *Systems Analyst Technology* under TECHNICAL EDUCATION)

14.02 99 00 00 **Other Business Data Processing Systems Occupations**—Programs concerned with business data processing systems occupations emphasized in instruction which are not classified above, e.g., tape librarians who are responsible for storing magnetic tapes used in processing data and making them available when they are again needed. (D.O.T. No. 223. series) (Specify.) (See also 03.17 99 00 00 *Other Data Processing and Computer Operation* under BUSINESS.)

14.03 00 00 00 **FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS**

Planned learning experiences which include a combination of courses and practical experiences concerned with the recording and retrieval of data, including classifying, sorting, and filing correspondence, records, and other data. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Duplicating Machine Operators, File Clerks, General Office Clerks, and other filing, office machines, and general office clerical occupations. (See also 03.10 00 00 00 *Business Machines* and 03.14 00 00 00 *Clerical Practice* under BUSINESS.)

14.03 01 00 00 **Duplicating Machine Operators**—Programs concerned with reproducing handwritten or typewritten matter by use of duplicating machines and devices. Efficiency in the operation and proper maintenance of various types of duplicating equipment are emphasized. (D.O.T. No. 207. series) (See also 03.10 04 00 00 *Duplicating Machines* under BUSINESS.)

14.03 02 00 00 **File Clerks**—Programs concerned with the recording and retrieval of data, including classifying, sorting, and filing correspondence, records, and other data. (D.O.T. No. 206. series) (See also 03.21 00 00 00 *Filing* under BUSINESS.)

14.03 03 00 00 **General Office Clerks**—Programs concerned with performing a variety of clerical duties utilizing knowledge of systems and reports, including copying data and compiling records and reports; tabulating and posting data in record books; providing information and conducting interviews; operating office machines; and handling mail and correspondence. (D.O.T. No. 219. series) (See also 03.22 00 00 00 *Filing and Record Control* under BUSINESS.)

14.03 99 00 00 **Other Filing, Office Machines, and General Office Clerical Occupations**—Programs concerned with filing, office machines, and general office clerical occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 208. and 209. series) (Specify.)

14.04 00 00 00 **INFORMATION COMMUNICATION OCCUPATIONS**

Learning experiences which include a combination of courses and practical experiences concerned with the distribution of information, e.g., by mail, telephone, telegraph, and in person. Career objectives are identified with a variety of occupational groups (as indicated in the *Dictionary of Occupational Titles*), and specialization such as Communication Systems Clerks and Operators, Correspondence Clerks, Mail and Postal Clerks, Mail-preparing and Mail-handling Machine Operators, Messengers and Office Boys and Girls, Receptionists and Information Clerks, and other information communication occupations. (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)

14.04 01 00 00 **Communication Systems Clerks and Operators**—Programs concerned with operating telephone switchboards and similar equipment for relaying incoming and interoffice calls; establishing connections between subscribers; supplying information; calculating charges; and operating telegraph and similar equipment for transmitting and receiving messages. (D.O.T. Nos. 235. and 236. series)

14.04 02 00 00 **Correspondence Clerks**—Programs concerned with composing correspondence and related items for the purpose of obtaining or giving information. (D.O.T. No. 204. series) (See also 03.06 02 00 00 *Report Writing* under BUSINESS.)

14.04 03 00 00 **Mail and Postal Clerks**—Programs concerned with preparing incoming and outgoing mail for distribution, including time stamping, reading, sorting and delivery of incoming mail, and sealing and stamping outgoing mail or packages; selling postage stamps and postal cards; writing money orders; computing mail costs; sorting outgoing mail; and recording daily transactions. (D.O.T. Nos. 231. and 232. series)

14.04 04 00 00 **Mail-preparing and Mail-handling Machine Operators**—Programs concerned with operating machines to print names, addresses, and similar information, on items such as envelopes, accounting forms, and advertising literature; to address, fold, stuff, seal, and stamp mail; and to open envelopes. (D.O.T. No. 234. series)

14.04 05 00 00 **Messengers and Office Boys and Girls**—Programs concerned with running errands; sorting and delivering letters, packages, and messages; furnishing workers with clerical supplies; and performing similar routine tasks in an office. (D.O.T. No. 230. series)

14.04 06 00 00 **Receptionists and Information Clerks**—Programs concerned with meeting the public through (1) answering telephone and information requests; (2) locating offices and employees; and (3) keeping records of callers, making appointments, and interviewing people to secure required data, e.g., hospital admittance data, insurance data, and similar information. (D.O.T. No. 237. series)

14.04 99 00 00 **Other Information Communication Occupations**—Programs concerned with information communication occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 239. and 249. series) (Specify.)

14.05 00 00 00 **MATERIALS SUPPORT OCCUPATIONS: TRANSPORTING, STORING, AND RECORDING**

Planned learning activities which include a combination of courses and practical experiences concerned with (1) receiving, storing, issuing, shipping, requisitioning, and accounting for stores of material or material in use; (2) assigning locations and space to items, including verification of quality, identification, condition, and value; (3) preparing or committing stocks for shipment; (4) inventorying stock; (5) replenishing depleted items; and (6) filling orders, and issuing tools, equipment, or materials to workers. Career objectives are identified with a variety of occupational groups and specializations (as indicated in the *Dictionary of Occupational Titles*), such as Planning and Production Clerks, Shipping and Receiving Clerks, Stock and Inventory Clerks, Traffic, Rate, and Transportation Clerks, and other transporting, storing, and recording occupations. (See also 03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)

14.05 01 00 00 **Planning and Production Clerks**—Programs concerned with routing parts for fabricating operations or repairs, developing work plans prior to production, scheduling work for and delivering parts to avoid overproduction, compiling records and reports on the number and types of units produced, and scheduling shipment of parts. (D.O.T. No. 221. series)

14.05 02 00 00 **Quality Control Clerks**—Programs concerned with verification of quality and quantity specifications. (D.O.T. No. 168. series)

14.05 03 00 00 **Shipping and Receiving Clerks**—Programs concerned with assembling, packing, addressing, stamping or receiving, unpacking, verifying, and recording incoming merchandise or materials. (D.O.T. No. 222. series)

14.05 04 00 00 **Stock and Inventory Clerks**—Programs concerned with receiving, storing, shipping, and issuing supplies, materials, and equipment in a stockroom or warehouse environment, including taking inventories, keeping records, and requisitioning stock. (D.O.T. No. 223. series)

14.05 05 00 00 **Traffic, Rate, and Transportation Clerks**—Programs concerned with calculating fares for carriers from rate tables. Included are the study of maps to select or lay out and measure travel routes, considering type of vehicle, distance, destination, and passenger or rate service; the preparation of written reports or informing customers orally; and computing schedules and cost factors. (D.O.T. Nos. 222. and 919. series)

14.05 99 00 00 **Other Materials Support Occupations: Transporting, Storing and Recording**—Programs concerned with receiving, storing, issuing, shipping, requisitioning and accounting for stores of materials emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 224., 229., and 919. series) (Specify.)

14.06 00 00 00 **PERSONNEL, TRAINING, AND RELATED OCCUPATIONS**

Planned learning experiences which include a combination of courses and practical experiences concerned with personnel administration of an organization and the facilitating functions of scheduling and conducting clerical work and management and operations of organizations. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as *Educational and Training Assistants*, *Interviewers and Tests Technicians*, *Personnel Assistants*, and other personnel, training, and related occupations. (See also 03.11 00 00 00 *Business Psychology* and 03.26 03 00 00 *Labor Management Relations* under BUSINESS.)

14.06 01 00 00 **Educational Assistants and Training Specialists**—Programs concerned with the training of personnel in the facilitating functions of an organization, dealing with personnel such as teacher aides in education, training specialists in industry, and others. (D.O.T. No. 166. series)

14.06 02 00 00 **Interviewers and Tests Technicians**—Programs concerned with interviewing and administering tests to individuals to determine their appropriateness for employment and/or advancement. Also involved are the uses of appropriate measuring devices, and the administration, scoring, and analysis of individual and group progress. (D.O.T. Nos. 166. and 249. series)

14.06 03 00 00 **Personnel Assistants**—Programs concerned with formulating policies relating to the personnel administration of an organization. Emphasized are the conduct of programs of recruitment, selection, training, promotion, welfare, safety, compensation, separation of employees, and recreation involving personnel. A practical background in psychology is required for some occupa-

	tions in personnel research, and in the administration of testing and counseling programs. (D.O.T. Nos. 166. and 205. series)
14.06 99 00 00	**Other Personnel, Training, and Related Occupations**—Programs concerned with personnel, training, and related occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 166., 205., and 249. series) (Specify.)
14.07 00 00 00	**STENOGRAPHIC, SECRETARIAL, AND RELATED OCCUPATIONS** Planned learning activities which include a combination of courses and practical experiences concerned with making, classifying, and filing records, including written communications. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Executive Administrative Secretary, Secretaries, Stenographers, and other stenographic, secretarial, and related occupations. (See also 03.06 00 00 00 *Business Communications*, 03.28 00 00 00 *Office Practice*, and the category 03.34 00 00 00 *Shorthand, Stenographic, and Secretarial* under BUSINESS.)
14.07 01 00 00	**Executive Secretary**—Programs concerned with secretarial coordinating, expediting, and facilitating functions of the office for aiding the executive under his direction and in a confidential relationship. (See also 14.08 01 00 00 *Administrative Assistants* under *Supervisory and Administrative Management Occupations.*)
14.07 02 00 00	**Secretaries**—Programs related to occupations concerned with carrying out administrative and general office duties in addition to taking and transcribing dictation. (D.O.T. No. 201. series)
14.07 03 00 00	**Stenographers**—Programs concerned with taking shorthand or special writing of notes by hand or machine and transcribing them. (D.O.T. No. 202. series)
14.07 99 00 00	**Other Stenographic, Secretarial, and Related Occupations**—Programs concerned with stenographic, secretarial, and related occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. No. 209. series)
14.08 00 00 00	**SUPERVISORY AND ADMINISTRATIVE MANAGEMENT OCCUPATIONS** Learning activities and experiences concerned with various responsibilities such as (1) studying policies, organizational structures, and administrative practices of such organizations as governmental units, industrial firms, and nonprofit groups; (2) reviewing periodic budgets submitted by operations personnel; (3) preparing reports summarizing findings and recommending changes in policy, organization, and administration to line management; (4) consolidating the budget estimates and preparing financial reports for consideration and action by upper echelons of management; and (5) supervising and coordinating activities, determining work procedures, and assigning duties. (See also the category 03.01 00 00 00 *Accounting*; the items 03.04 00 00 00 *Budget Control*, 03.06 00 00 00 *Business Communications*, 03.08 00 00 00 *Business Finance*, 03.09 00 00 00 *Business Law*; 03.12 00 00 00 *Business Statistics*; and the category 03.26 00 00 00 *Business and Management Principles* under BUSINESS.)
14.08 01 00 00	**Administrative Assistants**—Programs concerned with the coordinating, expediting, and facilitating functions of the office for aiding the executive, under his direction and in a confidential relationship, in the discharge of his duties as related to personnel, the budget, records control, housekeeping, making studies, conducting analyses, reviewing reports, and other responsibilities. (D.O.T. No. 169. series) (See also 03.01 12 00 00 *Secretarial Accounting* under BUSINESS and 14.07 01 00 00 *Executive Secretary.*)
14.08 02 00 00	**Budget Management Analysts**—Programs concerned with examining, analyzing, and interpreting accounting records, and with the study of policies, organizational structures, and administrative practices of organizations. (D.O.T. No. 161. series)
14.08 03 00 00	**Clerical Office Supervisors**—Programs concerned with supervisory occupations involving the facilitating function of an organization rather than a scientific, technical, or administrative specialty. (D.O.T. Nos. 160.–169. series)
14.08 04 00 00	**Data-methods and Systems-procedures Analysts**—Programs concerned with studying policies, organizational structures, and administrative practices of an organization for the purpose of recommending and installing systems procedures and methods improvements. (D.O.T. 012. series)
14.08 05 00 00	**Office Managers and Chief Clerks**—Programs concerned with the facilitating function of the office involving supervision of the budget and management analysis staff of an office, scheduling and conducting work, and other administrative specializations. (D.O.T. No. 169. series)
14.08 99 00 00	**Other Supervisory and Administrative Management Occupations**—Programs concerned with supervisory and administrative management occupations emphasized in instruction which are not classified above including emerging occupations. (D.O.T. Nos. 160.–169., 188., and 189. series) (Specify.)
14.09 00 00 00	**TYPING AND RELATED OCCUPATIONS** Planned learning activities which include a combination of courses and practical experiences concerned with recording data by means of typewriters and similar devices. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Clerk Typists, Key Punch and Coding Equipment Operators, Typists, and other typing and related occupations. (See also 03.06 00 00 00 *Business Communications* and the category 03.35 00 00 00 *Typewriting* under BUSINESS.)
14.09 01 00 00	**Clerk Typists**—Programs concerned with the performance of general clerical work requiring the use of a typewriter in a majority of the duties, including compiling and typing reports, bills, application forms, shipping tickets, and other data from clerical records. These activities also include the filing of records and reports, posting information to records, sorting and distributing mail, answering telephones, com-

	puting using adding machines, and other similar duties. (D.O.T. No. 209. series)
14.09 02 00 00	**Typists**—Programs concerned with recording data by means of a typewriter or similar device. (D.O.T. No. 203. series) (See also 03.35 02 00 00 *Production Typewriting*, 03.35 03 00 00 *Typewriting, First Course*, and 03.35 04 00 00 *Typewriting, Second Course*, under BUSINESS.)
14.09 99 00 00	**Other Typing and Related Occupations**—Programs concerned with typing and related occupations emphasized in instruction which are not classified above, including emerging occupations. (Specify and list D.O.T. Nos. 209. and 219. series)
14.99 00 00 00	**OTHER OFFICE OCCUPATIONS** Include here other planned learning experiences emphasized in new or emerging office occupations not listed or classifiable in one of the above major categories. (Specify and list D.O.T. Nos.)

SOCIAL SCIENCES/SOCIAL STUDIES
15.00 00 00 00

The social sciences/social studies are comprised of interrelated subject matter organized to impart knowledge, develop skills, and identify goals concerning elements and institutions of human society in the disciplines of history, economics, political science, sociology, anthropology, psychology, geography, and philosophy.

The *social studies* are comprised of those aspects of the above which in practice are selected for instructional purposes in schools and colleges. Social studies are usually socially oriented with regard to aims and subject matter concerning the elements and institutions of human society.

Employing systematic, analytical, and theoretical methods, the *social sciences* include modes of inquiry such as historical or genetic approaches, survey research, experimentation, content analysis, and logical analysis. Illustrative methods as techniques include: field studies, case studies, statistical analysis, map and photo interpretations, simulation, participant observation, polling, questionnaires, and others.

The Ad Hoc Committee for Social Sciences/Social Studies applied the following rationale to the selection of substantive content for placement in the Social Sciences/Social Studies area: (1) the items selected and classified were determined by the committee as representing the subject matter most commonly taught in this area in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the items included in the classification could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of the social sciences/social studies as an integral part of the instructional program. As an example, the International Relations Club provides additional opportunities to pursue personal interests, apply various acquired skills such as research, and increase knowledge in selected aspects of the social sciences/social studies, and develop leadership qualities through club activities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the International Relations Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 16 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the social sciences/social studies.

15.01 00 00 00	**ANTHROPOLOGY** The study of man and his works in which attention is focused on the relation between man and culture in the past and present, and on man's ongoing cultural development and the varieties of human, physical, social, and cultural forms. Anthropology is organized under such descriptive titles as Archaeology, Cultural Anthropology, Enthnology, and Physical Anthropology.
15.01 01 00 00	**Archaeology**—The study of human history from the remains of past cultures.
15.01 02 00 00	**Cultural (Social) Anthropology**—The comparative study of the culture of societies throughout the world, over time, with emphasis on learned and shared behavior. The following topics frequently are included for study:
15.01 02 01 00	Acculturation
15.01 02 02 00	American Indians
15.01 02 03 00	Community Development
15.01 02 04 00	Culture
15.01 02 05 00	Cultural Change
15.01 02 06 00	Cultural Evolution
15.01 02 07 00	Cultural Psychology
15.01 02 08 00	Cultural Transmission
15.01 02 09 00	Cultural Values
15.01 02 10 00	Folk Societies
15.01 02 11 00	Kinship Systems
15.01 02 12 00	Peasant Societies
15.01 02 13 00	Personality and Culture
15.01 02 14 00	Prehistoric People
15.01 02 15 00	Primitive Peoples, e.g., Bushmen, Eskimos
15.01 02 16 00	Race
15.01 02 17 00	Social, Political, Economic Organization
15.01 02 99 00	OTHER TOPICS IN CULTURAL (SOCIAL) ANTROPOLOGY—Include here other topics emphasized in cultural anthropology which are not listed above. (Specify.)
15.01 03 00 00	**Ethnography**—Subject matter and activity concerned with the procedure for study-

	ing customary behavior—collecting data on living creatures and describing them.
15.01 04 00 00	**Ethnology**—The study of relationships between or among cultural traditions, culture areas, and cultures.
15.01 05 00 00	**Ethnoscience**—The study of native systems of description and classification of cultures.
15.01 06 00 00	**Physical Anthropology**—The study of man's physical characteristics, his biological history, and present varieties. Topics frequently studied include the following:
15.01 06 01 00	Evolution
15.01 06 02 00	Prehistoric People
15.01 06 03 00	Primitive Behavior
15.01 06 04 00	Primitive Peoples, e.g., Bushmen, Eskimos
15.01 06 05 00	Race
15.01 06 99 00	OTHER TOPICS IN PHYSICAL ANTHROPOLOGY—Include here other topics emphasized in physical anthropology which are not listed above. (Specify.)
15.01 99 00 00	**Other Anthropology**—Include here other subject matter emphasized in anthropology which is not classifiable above. (Specify.)
15.02 00 00 00	**AREA STUDIES (MULTIDISCIPLINARY)** Studies of selected areas which vary in scale from the small area, such as the neighborhood, to a large continental area such as South America. They may be defined in terms of political boundaries, geographic areas, or cultural characteristics. The term "area studies" usually connotes the interdisciplinary approach, from the more simple geography—history interpretation—to the complex cultural interpretation involving anthropology, sociology, economics, political science, and other related areas. Area studies frequently are grouped as follows:
15.02 01 00 00	**Areas Beyond the United States:**
15.02 01 01 00	Africa
15.02 01 02 00	Asia
15.02 01 03 00	Australasia
15.02 01 04 00	Canada
15.02 01 05 00	Europe
15.02 01 06 00	Latin America
15.02 01 07 00	Middle East
15.02 01 08 00	Soviet
15.02 01 99 00	OTHER AREAS BEYOND THE UNITED STATES—Include here other areas beyond the United States emphasized in instruction which are not listed above. (Specify.)
15.02 02 00 00	**Regions of the United States:**
15.02 02 01 00	Midwest
15.02 02 02 00	North Central
15.02 02 03 00	Northeast
15.02 02 04 00	Northwest
15.02 02 05 00	Southeast
15.02 02 06 00	Southwest
15.02 02 99 00	OTHER REGIONS OF THE UNITED STATES—Include here other regions of the United States emphasized in instruction which are not listed above. (Specify.)
15.02 03 00 00	**Small Areas:**
15.02 03 01 00	Home State
15.02 03 02 00	Local Community
15.02 03 03 00	School Community
15.02 03 04 00	Classroom Community
15.02 03 05 00	Neighborhood
15.02 03 99 00	OTHER SMALL AREAS—Include here other small areas emphasized in instruction which are not listed above. (Specify.)
15.02 99 00 00	**Other Area Studies**—Include here other area studies emphasized in instruction which are not listed or classifiable above. (Specify.)
15.03 00 00 00	**CITIZENSHIP EDUCATION** The study of those portions of the social sciences/social studies, and cocurricular activities, which contribute to the development of understanding and attitudes conducive to effective participation in civic affairs.
15.04 00 00 00	**CONSERVATION-ENVIRONMENTAL EDUCATION** The study of related problems and promises of the new technologies concerned with natural resources and their utilization. Emphasis in instruction is on developing understanding and appreciation of one's natural heritage and responsibilities. (See also Major Aspects of the Biological Sciences, 13.02 00 09 00 *Conservation (Environment)*, under NATURAL SCIENCES.)
15.05 00 00 00	**CONSUMER EDUCATION** The study concerned with the development of knowledge, understanding, appreciations, and skills involved in the economic welfare of the consumer and consumer groups in everyday life, e.g., competency in managing money, purchasing and using goods and services, banking, investments, credit, consumer legislation, evaluation of consumer research and product-testing, and the role of the consumer in the economy. (Included as 03.15 00 00 00 *Consumer Education* under BUSINESS and 09.01 04 00 00 *Consumer Education* under HOME ECONOMICS)
15.06 00 00 00	**ECONOMICS** The study of man's use of limited resources to satisfy his wants—resources transformed by production into goods and services which, upon distribution, are transformed by consumption to yield the satisfaction of wants. The study of economics includes the analysis of the implications of alternative choices in the allocation of resources. (Included as 03.18 00 00 00 *Economics* under BUSINESS) Subject matter in economics is organized under various descriptive titles such as the following:
15.06 01 00 00	**Business and Industry Economics**—The study of how the business firm is organized and combines resources to produce goods and services, taking account of costs, prices, profits, and the nature and extent of competition in markets.
15.06 02 00 00	**Comparative Economics**—The study of (a) comparative economic systems: differences among economies in their arrangements for the production, distribution, and consumption of goods and services; (b) comparative economic thought: differences among economic explanation of the production, distribution, and consumption of goods and services; and (c) economic development: the evolution of economies toward industrialism, the growth of the world economy, and the growth of international trade.

15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued

15.06 03 00 00	**Consumer Economics**—The study of the problems in consuming the production of the economy as seen from the behavior of the individual consumer and the aggregate of consumers which is the consumer sector of the economy. (Included as 03.18 01 00 00 *Consumer Economics* under BUSINESS) (See also 04.00 00 89 00 *Economics of Consumption* under DISTRIBUTIVE EDUCATION.)
15.06 04 00 00	**History of Economic Thought**—The study of changes in the explanations of how economic systems have answered the questions: What shall be produced? How shall it be produced? For whom shall it be produced?
15.06 05 00 00	**Money and Banking**—The study of the influence upon economic activity of the quantity of money and credit and its cost (interest rates). (Included as 03.18 03 00 00 *Money and Banking* under BUSINESS)
15.06 06 00 00	**National Income (and components thereof)**—The study of the explanation of level, growth, stability, and composition of a nation's or region's income, including the influence of taxing, borrowing, and spending at Federal, State, and local levels.
15.06 07 00 00	**Principles of Economics**—Commonly included for study in a survey course in economics entitled "Principles of Economics" are the kinds of applications considered in the various types of economics described elsewhere in these pages. (Included as 03.18 04 00 00 *Principles of Economics* under BUSINESS)
15.06 08 00 00	**Resource Economics**—The study of the employment of (a) the labor resource, its wages, employment conditions, and organization into unions; (b) capital resources, that is, the manmade instruments of production; and (c) natural resources such as land, mineral wealth and water. (Included as 03.18 02 00 00 *Labor Economics* under BUSINESS)
15.06 99 00 00	**Other Economics**—Include here other organized subject matter emphasized in economics which is not listed above, e.g., mathematical economics, economic theory, institutional economics, economic statistics, and operations research. (Specify.)
15.07 00 00 00	**GEOGRAPHY** The study of spatial relations and spatial processes on the earth's surface, studied on a variety of scales ranging from local to worldwide. Included are both empirical and theoretical approaches to an understanding of (a) the spatial relations and processes of physical, biotic, and human phenomena considered separately or in varying combinations, and (b) spatial relations and processes in the abstract. An understanding of these spatial relations and processes and their significance to human activities encourages analysis of why things are when they are. Subject matter in geography is organized under various descriptive titles, including the following:
15.07 01 00 00	**Historical Geography**—The study of the geographies of the past. It is concerned with the reconstruction of the geography of a past period. Thus, an historical geography of any region is theoretically possible for every period of its history.
15.07 02 00 00	**Human (Cultural) Geography**—The geographical study of man and his economic, social, and political activities as they are distributed over the surface of the earth. (Comprises a portion of the definition of 03.19 00 00 00 *Economic Geography* under BUSINESS) The following considerations are frequently included for study:
15.07 02 01 00	Cartographic Interpretation
15.07 02 02 00	Circulation Patterns
15.07 02 03 00	Economic Patterns
15.07 02 04 00	Political Patterns
15.07 02 05 00	Population
15.07 02 06 00	Settlement Patterns
15.07 02 99 00	OTHER HUMAN GEOGRAPHY—Include here other human geography emphasized in instruction which is not listed above. (Specify.)
15.07 03 00 00	**Physical Geography**—The study of that branch of geography which deals with the distribution and interrelationships of the physical and biotic features of the earth's surface: landforms, soils, climates, water (both surface and subsurface), minerals, and wild plant and animal life. Concerned exclusively with man's physical and biotic habitat, physical geography can properly be regarded as a natural science and is frequently included in science education drawing on earth science for subject matter. In practice, the following major aspects of physical geography frequently are included for study:
15.07 03 01 00	Atmosphere: weather, climate
15.07 03 02 00	Biosphere: wild plants, wild animals
15.07 03 03 00	Exosphere, e.g., remote sensing
15.07 03 04 00	Hydrosphere: oceans, other surface water bodies, subsurface water, land ice
15.07 03 05 00	Lithosphere: land forms, minerals, soils
15.07 03 99 00	OTHER ASPECTS OF PHYSICAL GEOGRAPHY—Include here other aspects of physical geography emphasized in instruction which are not listed above. (Specify.)
15.07 04 00 00	**Regional Geography**—The study of regions, a region being an area of any size that is homogeneous with respect to specific criteria. (Comprises a portion of the definition of 03.19 00 00 00 *Economic Geography* under BUSINESS) In practice, regional geography comprises a wide variety of studies—physical, biotic, and human—such as the following:
15.07 04 01 00	Agricultural Regions, such as dairy belt or corn belt
15.07 04 02 00	Climatic Regions, such as rainy tropics or arid lands, or hot and cold regions
15.07 04 03 00	Continental Regions, such as North America
15.07 04 04 00	Culture Regions, such as Latin America
15.07 04 05 00	Landform Regions, such as mountain areas
15.07 04 06 00	Manufacturing Regions, such as the Anglo-American Manufacturing Belt
15.07 04 07 00	Political Regions, such as an individual State, a group of states, or a nation
15.07 04 08 00	Population (Human) Regions
15.07 04 09 00	Vegetation Regions, such as steppe or savanna areas
15.07 04 99 00	OTHER REGIONAL GEOGRAPHY—Include here other regional geography emphasized in instruction which is not listed above. (Specify.)

15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued

15.07 99 00 00 **Other Geography**—Include here other organized subject matter emphasized in geography which is not listed or classifiable above. (Specify.)

15.08 00 00 00 **HISTORY**

The study of man's past considered in terms of what has been interpreted about change or process. The conventional categories of inquiry are: political history, economic history, social history, and intellectual history. Consideration is also given to how historians proceed by gathering, criticizing, synthesizing, and interpreting evidence concerning accessible and relevant periods of the past. The subject matter of history is organized under various descriptive titles such as follow:

15.08 01 00 00 **American History (including Canada, Latin America, and the United States)**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the western hemisphere. American history considers, e.g., pre-Columbian cultures, European discovery and exploration, colonial society, growth of independent nations, and inter-American relations.

15.08 02 00 00 **Local History**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with localities. Local history considers, e.g., settlement, growth of the economy, ethnic influences, and cultural development.

15.08 03 00 00 **Modern History**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the period of modernity (since approximately 1500 A.D.) Modern history considers, e.g., the expansion of Europe, the impact of romantic thought, the industrial revolution, and anti-colonialism in Africa and Asia.

15.08 04 00 00 **State History**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with individual American States. State history considers, e.g., exploration, constitutional evolution, development of transportation and communication, and military contribution.

15.08 05 00 00 **United States History**—The study of the history of selected events, individuals, groups (e.g., racial, religious, ethnic), institutions, artifacts, ideas, and other phenomena associated with the United States. United States history considers, e.g., colonial society, the westward movement, the Civil War, and America's emergence as a great power.

15.08 06 00 00 **Western Civilization**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the western world. Western civilization considers, e.g., rise and fall of the Roman Empire, the Renaissance and Reformation, the rise of the nation State, and the secularization of society.

15.08 07 00 00 **Nonwestern Civilization**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the nonwestern world (Asia and Africa). Nonwestern civilization considers, e.g., the development of Chinese thought, imperial enterprise in Africa, social revolution in Southeast Asia, and diffusion of western ideas.

15.08 08 00 00 **World Civilization**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the entire world, usually taught in junior colleges with an emphasis on social and intellectual changes rather than political changes. World civilization considers, e.g., the emergence of Greek philosophy, the proliferation of Christianity, and the integration of the international community.

15.08 09 00 00 **World History**—The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the entire world. World history considers, e.g., emergence of prehistoric man and society, the Roman conquests, the westernization of Asia, and the impact of technology since 1500 A.D.

15.08 99 00 00 **Other History**—Include here other subject matter emphasized in history which is not listed above, e.g., ancient history, history of Latin America, history of democratic thought, and history of religion. (Specify.)

15.09 00 00 00 **HUMANITIES**

The study of a group of related subjects such as literature, art, music, religion, history, philosophy, and classical and modern languages—with aspects of social sciences/social studies usually forming the core—concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject-matter areas are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 12.06 00 00 00 *Humanities* under MUSIC.)

15.10 00 00 00 **PHILOSOPHY**

A systematically organized body of knowledge concerned with the investigation and study of human nature and conduct as conceived and interpreted in terms of facts and principles of reality. Usually, the substance of philosophy includes aspects of esthetics, ethics, logic, metaphysics, and the theory of knowledge. The subject matter of philosophy is organized under various descriptive titles such as those which follow:

15.10 01 00 00 **Ethics**—The study and critical examination of morals, the meaning of "good," the nature of moral judgment, and the justification of conduct in terms of what is considered right and proper standards of behavior. Considerations are given to the theoretical problems involved in ethics and the development of understanding which enable pupils to establish personal views concerning moral phenomena.

15.10 02 00 00 **History of Philosophy**—The study of selected philosophers and areas of scholarship in philosophy from the pre-Socratic era to the present.

15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued

15.10 03 00 00 **Introduction to Philosophy**—The study of the major philosophical problems, issues, and conflicts as treated by classical and modern philosophers. The theory of knowledge, facts and principles of reality and of human nature and behavior, and the implications of morality, science, and religion in everyday life are among the assumptions and issues frequently examined.

15.10 04 00 00 **Logic**—The study of the scientific principles of formal reasoning and criteria governing validity in thinking. Attention may be given to a wide range of considerations, such as application of logic and rhetoric to everyday situations, symbolic logic, semantics, processes of argument, inconsistency, methods of investigation, and propositions and inferential interrelationships. (See also 15.04 01 01 00 *Logic* under ENGLISH LANGUAGE ARTS.)

15.10 05 00 00 **Metaphysics**—The study of the science of reality—of being. The nature of mind and of space and of time, the principles and causes of things, and the existence of universals are aspects of metaphysics which are frequently examined, as well as philosophical agreements and disagreements with these issues.

15.10 06 00 00 **Philosophy of Religion**—The critical investigation and study of religious experiences, beliefs and statements, arguments about the existence of a deity or deities, and the evaluation of the historical derivation of a religion or religions.

15.10 99 00 00 **Other Philosophy**—Include here other subject matter emphasized in philosophy which is not listed above. (Specify.)

15.11 00 00 00 POLITICAL SCIENCE

The study of government(s) and political behavior. The subject matter provides pupils with insight into a variety of factors important to the study of governments and culture, and systems processes, policies, theories, goals, and the relationships between governments. The subject matter of government is organized under various descriptive titles such as those which follow:

15.11 01 00 00 **American Government**—The study of the processes and structures and processes by which men govern themselves at the local, State, and national levels.

15.11 01 01 00 Constitution, The—The study of the legal framework under which the American political system operates.

15.11 01 99 00 Other American Government—Include here other subject matter emphasized in American government. (Specify.)

15.11 02 00 00 **Comparative Systems**—The study and comparative analysis of political institutions, processes, and behavior in various countries—developing and developed.

15.11 03 00 00 **Contemporary World Affairs**—The analysis of economic, sociological, political, legal, cultural, and other factors which influence the relations between nations.

15.11 04 00 00 **International Relations**—The study of agencies, operations, and principles involved in communication and interaction among nations, with emphasis typically given to relations among governments.

15.11 05 00 00 **Political Parties and Public Opinion**—The development, organization, and operation of political parties and pressure groups and the formulation and role of public opinion.

15.11 06 00 00 **Political Socialization**—The study of the ways in which society transmits political orientations, including knowledge, norms, and practices from one generation to the next.

15.11 07 00 00 **Political Theory**—The study of the major schools of political philosophy, including the development of modern methodological techniques relevant to political science.

15.11 99 00 00 **Other Political Science**—Include here other subject matter emphasized in political science which is not listed above. (Specify.)

15.12 00 00 00 PSYCHOLOGY

The study and systematic investigation of organisms, especially human beings, and their collective characteristics—their intelligence, feelings, and attitudes, and their behavior in relation to physical and social environment. The subject matter of psychology is organized under various descriptive titles such as those which follow:

15.12 01 00 00 **Developmental Psychology**—The investigation and study of those aspects of psychology concerned with the progressive development and behavior in childhood and adolescence. Frequently emphasized for study are: behavior and mental growth, the process of maturation, the concept of self, norms in behavior, social norms (relationship with people), heredity and environment and their interaction, parent-child relationships, and the effects of cultural and social forces upon attitudes and values.

15.12 02 00 00 **Educational Psychology**—The investigation and study of a variety of aspects of psychology and their applications to classroom situations. Among considerations frequently emphasized are the nature and theory of learning, child and adolescent development, emotion and adjustment, motivation, and individual and group differences.

15.12 03 00 00 **General Psychology**—The study of the fundamental principles of human behavior. Basic concepts, the scope of psychology, psychological methods, human behavior, animal behavior, motivation, thought processes, theory of learning, characteristics of emotions, and perception are frequently emphasized. Subject matter is usually designed for study in breadth rather than for the study of selected aspects of psychology in depth.

15.12 04 00 00 **Psychology of Adjustment**—The study of the individual in terms of total adjustment with major emphasis applied to social environment. Among factors frequently emphasized for study are adjustment techniques, personality as a construct, theories of personality, the nature of conflict and adjustment in personality, and physiological and social aspects of personality development.

15.12 05 00 00 **Social Psychology**—The study of the behavior of individuals and of groups, of behavioral interactions, and of the influence of the group(s) on attitudes, emotions, and personality development. Among the aspects of social psychology frequently emphasized for study are the adjustment of individuals to group situations, including family, school, and occupation; social foundations of attitudes and behavior—develop-

15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued

ment and change; social judgments and perception; and psychological factors involved in race prejudice, war, and nationalism.

15.12 99 00 00 **Other Psychology**—Include here other subject matter emphasized in psychology which is not listed above. (Specify.)

15.13 00 00 00 SOCIOLOGY

The study of human society, its structure and processes. It includes a wide range of societal relationships— from the primary groups such as the family, the tribe, and the clan, to the complex groupings that characterize the megalopolis of urban society. Socialization, collective behavior, deviance from the group, culture, aspects of social status, and patterns of social change are among areas emphasized in subject matter. The subject matter of sociology is organized under various descriptive titles such as those which follow:

15.13 01 00 00 **Community, The**—The study of the social organization of a cluster of family groups, in a given locality, that are linked by a consciousness of similarities in attitudes, values, and problems. Among major aspects of "community" which are investigated and studied are the following:

15.13 01 01 00 **Rural Society**—A study of that portion of organized society living in rural areas, with emphasis on rural trends and problems.

15.13 01 02 00 **Urban Society**—Applications of sociological principles to the study of customs and institutions in an urban setting, with emphasis on metropolitan trends and problems. Aspects of urban planning may be appropriately included for investigation and study.

15.13 01 99 00 **Other Community**—Include here other organized subject matter concerning "community" and emphasized in instruction which is not listed above. (Specify.)

15.13 02 00 00 **Public Opinion and Political Sociology**—The investigation and study of the development of sociological attitudes and behavior, including voting behavior, pressure groups, mass communication, and detection and interpretation of propaganda.

15.13 03 00 00 **Socialization**—The study of the problems and processes of man becoming a participating member of society.

15.13 04 00 00 **Social Organization**—The study of the structure of groups, institutions, and agencies that comprise the structure of society. Among the groups, institutions, and agencies studied the following usually are included:

15.13 04 01 00 **Education**—The study of schools and other educational agencies—their structure, role in the socialization process, and function in a dynamic society.

15.13 04 02 00 **Family**—The study of the smallest group central to an organized society—its social, economic, and biological characteristics, functions, and problems.

15.13 04 03 00 **Religion**—The study about religious organizations and churches and their functions in a dynamic contemporary society.

15.13 04 99 00 **Other Social Organization**—Include here other subject matter emphasized in social organization which is not listed above. (Specify.)

15.13 05 00 00 **Social Problems**—The study of problems of human groups. The subject matter may appropriately include the study of: (a) family disorganization; (b) population imbalances; (c) delinquency; (d) crime—causes, effects, and remedies related to the pathology of society that involves the maladjustments of the individual which bring him into conflict with society; (e) poverty; and (f) ethnic group conflicts.

15.13 06 00 00 **Social Stratification**—The study of the hierarchical groups in society, such as classes and castes.

15.13 07 00 00 **Social Theory**—The investigation and study of the concepts and propositions developed in the systematic analysis of the structural components of human society and their interaction.

15.13 99 00 00 **Other Sociology**—Include here other subject matter emphasized in sociology which is not listed or classifiable above. (Specify.)

15.99 00 00 00 OTHER SOCIAL SCIENCES/SOCIAL STUDIES

Include here organized subject matter emphasized in social sciences/social studies which is not listed or classifiable above. (Specify.)

TECHNICAL EDUCATION
16.00 00 00 00

Technical education is concerned with that body of knowledge organized in a planned sequence of classroom and laboratory experiences, usually at the postsecondary level, to prepare pupils for a cluster of job opportunities in a specialized field of technology. The program of instruction normally includes the study of the underlying sciences and supporting mathematics inherent in a technology, as well as methods, skills, materials, and processes commonly used and services performed in the technology. A planned sequence of study and extensive knowledge in a field of specialization is required in technical education, including competency in the basic communication skills and related general education. Technical education prepares for the occupational area between the skilled craftsman and the professional person such as the physician, the engineer, and the scientist.

The technical education curriculum is so structured that it prepares the graduate to enter a job and be productive with a minimum of additional training after employment. It is designed to provide a background of knowledge and skills which will enable an individual to advance with the developments in the technology, and enables him, with a reasonable amount of experience and additional education, to advance into positions of increased responsibility.

The technician frequently is employed in direct support of the professional employee. For example, the engineering technician will be capable of performing such duties as assisting in the following engineering functions: designing, developing, testing, modifying of products and processes, production planning, writing reports, and preparing estimates; analyzing and diagnosing technical problems that

15 SOCIAL SCIENCES/SOCIAL STUDIES—Continued

involve independent decisions; and solving a wide range of technical problems by applying his background in the technical specialties—science, mathematics, and communicative and citizenship skills.

The Ad Hoc Committee for Technical Education applied the following rationale to the selection of substantitive content for placement in the Technical Education area: (1) the items selected and classified were determined as representing the subject matter most commonly taught in technical education in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter selected for placement under Technical Education could be defined in brief form using only salient descriptive elements.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

16.01 00 00 00 **ENGINEERING-RELATED TECHNOLOGY**

That part of the engineering field which requires the application of scientific and engineering knowledge and methods combined with technical skills necessary in the support of engineering activities. Persons prepared in this technology are a part of the engineering manpower team which includes the skilled craftsman, the technician, and the engineer, and work as technicians in close support of the engineer.

16.01 01 00 00 **Aeronautical Technology**—A planned program of classroom and laboratory experiences, including mathematics, the physical sciences, and a combination of aerodynamics, structures, materials, and electronics as applied to the design, testing, and development of aircraft. This program is designed to produce the ability to understand the propulsion, control, and guidance system of the airplane, and to collect pertinent engineering data in a research-and-development activity. This program prepares the graduate to work in direct support of the engineer in the aerospace industry.

16.01 02 00 00 **Agricultural Technology**—Specialized classroom and laboratory learning experiences in physical sciences, mathematics, and specialty courses dealing with farm machinery, farm structures, and rural electrification, designed to prepare the graduate to work in direct support of the agricultural engineer.

16.01 02 01 00 Agricultural Electrification Technology—Specialized learning experiences in electrical systems as applied to planning, estimating, and designing to meet the needs of the customer. (See also 01.03 07 00 00 *Agricultural Electrification* under AGRICULTURE.)

16.01 02 02 00 Agricultural Machinery and Equipment Technology—Specialized learning experiences in properties of soils, characteristics of crop growth, and the development of knowledge and understanding concerning mechanisms, control systems, and materials-handling as applied to the design, development, testing, and manufacture of agricultural machinery and equipment. (See also 01.03 01 00 00 *Agricultural Power and Machinery* under AGRICULTURE.)

16.01 02 03 00 Agricultural Structures and Conveniences—Specialized learning experiences concerned with the strength of building materials and elementary structures as applied to planning, estimating, and designing to meet the needs of the customer. (See also 01.03 02 00 00 *Agricultural Structures and Conveniences* under AGRICULTURE.)

16.01 02 99 00 Other Agricultural Technology—Include here other organized subject matter and experiences emphasized in agricultural technology which are not listed above. (Specify.)

16.01 03 00 00 **Architectural Technology (Building Construction)**—A program of instruction designed to provide the pupil with knowledge and understanding of scientific principles, mathematical concepts, and communicative and technical skills combined with laboratory experiences including creative design, testing, and model building which will enable him to be supportive to the architect and the architectural engineer. The subject matter is concerned with design, estimating, inspection, supervision, and contracts and specifications—primarily in the field of building construction—with emphasis on the art of form.

16.01 04 00 00 **Automotive Technology**—A sequence of classroom and laboratory experiences, including the study of scientific and mathematical principles which lead to understanding of the design, development, and testing of internal combustion engines and related component parts of the motor vehicle, including transmissions, electrical systems, and braking systems. This program is planned to prepare the graduate to perform duties concerned with designing, testing, and development in direct support of the automotive engineer.

16.01 05 00 00 **Chemical Technology**—A program of instruction designed to provide the pupil with knowledge of scientific principles, mathematical concepts, and communicative and technical skills combined with appropriate laboratory experiences which will enable him to be supportive to professional personnel in the chemical field. The subject matter emphasizes qualitative, quantitative, and analytical analyses in general and organic chemistry. In the unit-operation laboratory he studies material handling, crushing, grinding, and sizing. By pilot-plant operation he studies the machinery and methods used in extraction, distillation, evaporation, drying, absorption, and heat transfer in chemical technology. He designs, installs, and operates pilot plants for chemical manufacturing processes.

16.01 06 00 00 **Civil Technology**—A planned program of classroom and laboratory experiences including the study of physical sciences, mathematics, surveying, strength of materials, and other specialty courses leading to preparation for designing, testing, and supervising the construction of highways, railroads, airports, bridges, harbors, irrigation works, sanitary plants, and other structures. The graduate works in direct support of the civil engineer.

16.01 06 01 00 Roadway Technology—Specialized learning experiences designed to prepare personnel for duties such as surveying, designing routes, laying out roadways, testing materials, acquiring land and preparing plans and specifications for the construction of highways, railroads, and airports.

16.01 06 02 00 Sanitation Technology—Specialized learning experiences, including the study of biological sciences, planned for preparing personnel who will be involved in the design, construction, and operation of water systems, sewage disposal systems, and pollution control systems.

16.01 06 03 00 Structural Technology—Specialized learning experiences concerned with the preparation of personnel for duties such as structural detailing and design testing, building construction supervision, estimating, and specification writing.

16.01 06 99 00 Other Civil Technology—Include here other organized subject matter and experiences emphasized in civil technology which are not listed above. (Specify.)

16.01 07 00 00 **Electrical Technology**—An organization of subject matter and laboratory experiences designed to provide preparation in specialty courses, physical sciences, mathematics, and general education as applied to the design, development, and testing of electrical circuits, devices and systems for generating electricity, and the distribution and utilization of electrical power. These electrical systems incorporate, and require knowledge about, the application of electronic and instrumentation devices.

The program is designed to develop in the individual the capacity to perform in such areas as: model and prototype development and testing; systems analysis and integration including design, selection, installation, calibration and testing; development of corrective and preventive maintenance techniques; application of engineering data; and the preparation of reports and test results in support of the electrical engineer.

16.01 08 00 00 **Electronic Technology**—Subject matter and laboratory experiences organized to provide preparation in the speciality courses, physical science, mathematics, and general education concerned with the design, development, modification, and testing of electronic circuits, devices and systems. Subject matter incorporates solid state and microminiaturization devices and representative systems such as microwave systems, computers, and controls.

The program is designed to develop in the individual the capacity to perform in such areas as: practical circuit feasibility; prototype development and testing; development of maintenance techniques; systems analysis including design, selection, installation, calibration, and testing; and the application of engineering data and preparation of reports and test results in support of the professional personnel in the electronics field.

16.01 09 00 00 **Electromechanical Technology**—A selection and integration of specialized classroom and laboratory learning experiences in both the mechanical and electrical fields.

Instruction is planned to provide preparation for responsibilities concerned with the design, development, and testing of electromechanical devices and systems such as automatic control systems and servomechanisms, including vending machines, elevator controls, missile controls, tape-control machines, and auxiliary computer equipment.

The program of instruction is designed to develop understanding, knowledge, and skills which will provide the capacity to perform effectively in such areas as: feasibility testing of engineering concepts; systems analysis including design, selection, and testing; application of engineering data; and the preparation of written reports and test results in support of mechanical and electrical engineers.

16.01 10 00 00 **Environmental-control Technology**—Classroom and laboratory experiences designed to develop in the pupil knowledge and understanding concerned with the scientific principles and basic mathematics dealing with the control of temperature and quality of air, and the design, testing, installation, and development of heating and cooling systems. (See also 17.01 00 00 00 *Air Conditioning* under TRADE AND INDUSTRIAL OCCUPATIONS.)

16.01 10 01 00 Cooling—Specialized learning experiences concerned with cooling systems such as unit air conditioners and control systems. Instruction emphasizes design, development, and installation and their applications to cooling systems.

16.01 10 02 00 Heating—Specialized learning experiences concerned with heat generation systems such as oil burners, coal furnaces, and electrical heating units. Instruction emphasizes design, development, testing, and installation and their applications to heating systems.

16.01 10 03 00 Refrigeration—Specialized learning experiences concerned with such scientific principles as the laws of gases, the flow of fluids, and automatic control systems as applied to the temperature control of a particular environment, including food warehouses, cryogenic laboratories, and commercial food storage units.

16.01 10 99 00 Other Environmental-control Technology—Include here other organized subject matter and experiences emphasized in environmental-control technology which are not listed above. (Specify.)

16.01 11 00 00 **Industrial Technology**—A program of instruction designed to develop knowledge and understanding of scientific principles, mathematical concepts, and communicative and technical skills, combined with appropriate laboratory experiences which will prepare the pupil to be supportive to the industrial engineer in production and planning. The subject matter emphasizes the design and installation of integrated systems of materials, machinery, equipment, and personnel.

16.01 12 00 00 **Instrumentation Technology**—A sequence of classroom and laboratory experiences, supported by physical sciences and mathematics, concerned with providing an understanding in the fields of electricity, electronics, mechanics, pneumatics, and hydraulics as they pertain to applications of the principles of control and recording systems and automated devices. The instructional program is planned to prepare the pupil to design, develop prototypes, and test and evaluate control systems or automated systems and to prepare graphs, written reports and test results in support of the professional personnel working in the field of instrumentation.

16.01 13 00 00 **Mechanical Technology**—A program of instruction designed to develop knowledge and understanding concerning scientific principles, mathematical concepts, and communicative skills, combined with appropriate laboratory experiences which will prepare a pupil to become supportive to the mechanical engineer.

16.01 13 01 00 Energy Conversion—Specialized learning experiences designed to prepare personnel for duties in such fields as steam engineering, fuel and combustion analysis, steam and gas turbines, industrial power plant equipment, and internal combustion engines.

16.01 13 02 00 Machine and Tool Design—An organization of subject matter and experiences concerned with the preparation of drawings, specifications, calculations, and procedures emphasized in the design or redesign of parts, assemblies, tools, jigs, and fixtures, and the testing of the characteristics and performance of units and components.

16.01 13 03 00 Production—Specialized learning experiences designed to prepare personnel to perform duties in such areas of responsibility as process planning, machine selection, materials-handling, quality control, economics of production, inspection, and coordination between engineering design and production.

16.01 13 99 00 Other Mechanical Technology—Include here other organized subject matter and experiences emphasized in mechanical technology which are not listed above. (Specify.)

16.01 14 00 00 **Metallurgical Technology**—An organization of subject matter and laboratory experiences including specialty courses, physical sciences, mathematics, and general education concerned with the production, research, and/or quality control of metals. The instructional program is designed to prepare pupils for performing duties in such areas as: conducting tests on the properties of metals; pilot and production plant design and development; the development, operation, and alteration of test procedures and equipment; and the collection and analysis of data and preparation of comprehensive and detailed reports in support of professional personnel in the metallurgical field. (See also 17.24 00 00 00 *Metallurgy Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

16.01 15 00 00 **Nuclear Technology**—A combination of subject matter and laboratory experiences designed for the study of scientific principles, mathematical concepts, and communicative and technical skills which, when combined with appropriate laboratory situations, prepare the pupil to be supportive to professionals engaged in developing, manufacturing, testing, research, maintaining, storing, and handling materials in the nuclear science and energy field. The subject matter emphasizes nuclear physics, radioisotopes, chemistry, electronics, nuclear instrumentation, and safety procedures. Graduates may enter and develop in this field as reactor technicians, radiation safety technicians, and radioactive-materials technicians.

16.01 16 00 00 **Petroleum Technology**—A planned program of classroom and laboratory experiences which include mathematics, chemistry, physics, petrology, sedimentation, and geophysics as applied to the recovery and use of oil and gas. Instruction leads to preparation for: oil field exploration; supervision of rig construction, drilling, oil field services, crude petroleum production, and petroleum refining; and work in direct support of the engineers and geologists in the oil industry.

16.01 17 00 00 **Scientific Data Processing**—A combination of subject matter and experiences, including scientific principles and mathematical concepts, combined with specialty courses and applied laboratory experiences necessary in preparing pupils to: convert scientific, engineering, and other technical problem formulations to processible forms by computer; resolve symbolic formulations; prepare logical flow charts and block diagrams; encode resolvent equations for processing by applying knowledge of advanced mathematics, such as differential equations and numerical analysis; and gain understanding of computer capabilities and limitations.

The program is designed to provide in the pupil the capacity to perform such functions as: consulting with engineering and other technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing; observing the computer during testing or processing runs to analyze and correct programming and coding errors; reviewing results of computer runs for determining necessary modifications and reruns; developing new subroutines or the extension of the application of available programs; and the development of scientific machine languages to simplify programming statements and coding of future problems.

16.01 99 00 00 **Other Engineering-related Technology**—Include here other organized subject matter and experiences emphasized in engineering-related technology which are not classifiable or listed above, e.g., ceramics-engineering technology, marine-engineering technology, and mining-engineering technology. (Specify.)

16 02 00 00 00 AGRICULTURAL - RELATED TECHNOLOGY

That part of the agricultural field which requires the application of scientific knowledge and methods combined with technical skills in support of agricultural activities. Persons prepared in this technology are a part of the team which includes the skilled worker, the technician, and the scientists.

16.02 01 00 00 **Animal Science**—(For description see 01.01 01 00 00 *Animal Science* under AGRICULTURE.)

16.02 02 00 00 **Dairy Technology**—(For description see 01.01 01 00 00 *Animal Science* and 01.04

	01 02 00 *Dairy Products* under AGRICULTURE.)
16.02 03 00 00	**Food Processing Technology**—(For description see 01.04 01 00 00 *Food Products* under AGRICULTURE.)
16.02 04 00 00	**Plant Science**—(For description see 01.01 02 00 00 *Plant Science* under AGRICULTURE.)
16.02 99 00 00	**Other Agricultural-related Technology**—Include here other organized subject matter and experiences emphasized in agricultural-related technology which are not classifiable in the engineering-related technology category or are not listed in the above category. (Specify.)
16.03 00 00 00	**HEALTH-RELATED TECHNOLOGY** That part of the health occupations field which requires the application of scientific knowledge and methods combined with technical skills in support of the health occupations. Persons prepared in this technology are a part of the health team which includes the skilled worker, the technician, and the dentist, medical doctor, and other professionals.
16.03 01 00 00	**Dental Hygiene (Associate Degree)**—(For description see 07.01 02 00 00 *Dental Hygiene (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)
16.03 02 00 00	**Electroencephalograph Technician**—(For description see 07.09 01 00 00 *Electroencephalograph Technician* under HEALTH OCCUPATIONS EDUCATION.)
16.03 03 00 00	**Medical Laboratory Assisting**—(For description see 07.02 03 00 00 *Medical Laboratory Assisting* under HEALTH OCCUPATIONS EDUCATION.)
16.03 04 00 00	**Radiologic Technology (X-ray)**—(For description see 07.05 01 00 00 *Radiologic Technology (X-ray)* under HEALTH OCCUPATIONS EDUCATION.)
16.03 05 00 00	**Nursing (Associate Degree)**—(For description see 07.03 01 00 00 *Nursing (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)
16.03 99 00 00	**Other Health-related Technology**—Include here other organized subject matter and experiences emphasized in health-related technology which are not listed above. (Specify.)
16.04 00 00 00	**OFFICE-RELATED TECHNOLOGY** That part of the office occupations field which requires the application of scientific knowledge and methods combined with technical skills in support of office occupations. Persons prepared in this technology are a part of the office team which includes the skilled worker, the technician, and administrative management personnel.
16.04 01 00 00	**Computer Programmer**—(For description see 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.)
16.04 02 00 00	**Systems Analyst Technology**—(For description see 14.02 04 00 00 *Systems Analysts* under OFFICE OCCUPATIONS.)
16.04 99 00 00	**Other Office-related Technology**—Include here other organized subject matter and experiences emphasized in office-related technology which are not classifiable in the engineering-related technology category or are not listed in the above category. (Specify.)
16.05 00 00 00	**HOME ECONOMICS - RELATED TECHNOLOGY** That part of the home economics occupational field which requires the application of knowledge and methods combined with technical skills in support of activities concerned with children, food services, home furnishings, interior decorating, and related activities in the home economics field. Persons prepared in this technology are a part of the team which includes the skilled worker, the technician, and the professional.
16.05 01 00 00	**Child Care Center Assistant**—(For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)
16.05 02 00 00	**Hospital Children's Division Assistant**—(For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)
16.05 03 00 00	**Teacher's Assistant at the Preprimary Level**—(For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)
16.05 04 00 00	**Food Service Supervisor**—(For description see 09.02 03 00 00 *Food Management, Production, and Services* under HOME ECONOMICS.)
16.05 05 00 00	**Interior Decorator Assistant**—(For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)
16.05 06 00 00	**Home Equipment Demonstrator**—(For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)
16.05 99 00 00	**Other Home Economics-related Technology**—Include here other organized subject matter and experiences emphasized in home economics-related technology which are not listed above. (Specify.)
16.06 00 00 00	**MISCELLANEOUS TECHNICAL EDUCATION** Examples of other organized technical education which may be classified in this category, are:
16.06 01 00 00	**Commercial Pilot Training**—A program of classroom instruction and practical experience, including mathematics and the appropriate physical sciences, designed to prepare the student to pilot and eventually assume command responsibility for aircraft carrying passengers or freight. The program is planned to enable the student to acquire competency and knowledge in such fields as: aircraft structure, behavior, and operation; aircraft systems, instrumentation, and controls; radio communications as applied to aircraft; meteorology; navigation; airways safety and traffic regulations; and other aspects of a pilot's duties and responsibilities. The student will be expected to become conversant with governmental rules and regulations pertaining to piloting aircraft and will be expected to pass any tests prescribed by the Federal Aviation Agency for a Commercial Pilot's Certificate upon satisfactory completion of the designated sequence of courses.
16.06 02 00 00	**Fire and Fire Safety Technology**—A planned sequence of classroom instruction (including the appropriate sciences such as chemistry) and practical experiences designed to prepare the student to function as

a fire control and fire safety specialist. The program is planned to enable the student to acquire competency and knowledge in one or more of such diverse fields as: structural design and materials; meteorological factors impinging upon fire situations; firefighting and control, wherein he inspects equipment and advises as to its proper usage based upon an understanding of the chemistry of combustion and the most modern techniques for coping with fires; the handling of hazardous materials (such as petroleum products, and other volatile, explosive, or corrosive materials) either routinely or in an accident situation; the inspection of public and private property to evaluate fire and fire safety conditions, wherein he makes recommendations for correction of unsafe conditions; advising local governments, private industries, and individual citizens concerning the prevention of accidents and fires; conducting educational activities, though regular school programs or special campaigns, to promote fire safety and the prevention of accidents and fires.

16.06 03 00 00 **Forestry Technology**—A sequence of classroom and laboratory experiences, including appropriate physical and biological sciences, designed to prepare the student to function as a technical specialist in the utilization of our timber resources. The program is planned to enable the student to acquire competency in one or more of such areas as: harvesting of timber, wherein he surveys timber lands, draws topographical maps, selects trees for cutting, and plans the transportation of logs to mills or loading sites; conducting or assisting in research involving the preparation of wood for commercial use, and the preservation and utilization of wood and its by-products; developing, improving, or determining methods of handling, curing, shaping, and treating wood in the course of manufacturing wooden products; investigating and assisting in setting up chemical or mechanical processes for converting wood into various commodities; and testing wood for such properties as strength, elasticity, and endurance, and recommending proper utilization.

16.06 04 00 00 **Oceanographic Technology (Physical, Biological, and Fisheries)**—This item is not defined here because it is presently undergoing extensive study and development.

16.06 05 00 00 **Police (Law Enforcement and Corrections) Science Technology**—A planned sequence of classroom instruction and laboratory experiences designed to prepare a student to function as one or more of the following: (1) a generalist in any law enforcement agency concerned with patrol and investigative activities, traffic control, initial contact with the public such as obtaining information, preparing reports, and testifying in court; (2) an evidence technician operating in a crime laboratory or mobile unit concerned with the collection, preparation, and transportation of physical evidence—including the use of skills in photography and report writing; and (3) a technician—primarily concerned with delinquency or crime prevention—who may be employed by a police agency, juvenile court, or correctional institution to (a) carry out responsibilities which may include investigation and referral of dependent-neglected children as well as delinquents and youthful offenders, (b) supervise persons on probation, or (c) provide rehabilitative services to offenders.

16.06 99 00 00 **Other Miscellaneous Technical Education**—Include here other aspects of technical education emphasized in instruction which are not listed in or appropriate to one of the above categories. (Specify.)

TRADE AND INDUSTRIAL OCCUPATIONS
17.00 00 00 00

Trade and industrial occupations is the branch of vocational education which is concerned with preparing persons for initial employment, or for upgrading or retraining workers in a wide range of trade and industrial occupations. Such occupations are skilled or semiskilled and are concerned with layout designing, producing, processing, assembling, testing, maintaining, servicing, or repairing any product or commodity. Instruction is provided (1) in basic manipulative skills, safety judgment, and related occupational information in mathematics, drafting, and science required to perform successfully in the occupation, and (2) through a combination of shop or laboratory experiences simulating those found in industry and classroom learning. Included is instruction for apprentices in apprenticible occupations or for journeymen already engaged in a trade or industrial occupation. Also included is training for service and certain semiprofessional occupations considered to be trade and industrial in nature.

The *Ad Hoc* Committee for Trade and Industrial Occupations applied the following criteria to the selection of substantive content for placement in the subject-matter area: (1) the content was determined by consensus of the committee to be unique and appropriate to trade and industrial occupations; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter were identifiable by titles which the *ad hoc* committee considered to be most appropriate to trade and industrial occupations.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of trade and industrial occupations as an integral part of the instructional program. As an example, the Vocational Industrial Clubs of America provide additional opportunities to develop leadership, civic responsibilities, other qualities, and an understanding of the world of work in trade and industrial occupations. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242. As an illustration, the Vocational Industrial Clubs of America can be identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 33 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page11 and in figure 2 on page 13.

17.01 00 00 00 **AIR CONDITIONING**
Classroom and shop experiences which enable the student to become proficient in the installation, repair, and maintenance of commercial, industrial, and domestic air conditioning systems. Included is instruction in the theory and application of basic principles involved in conditioning of air: cooling, heating, filtering, and controlling humidity; the operating characteristics of various units and parts; blueprint reading; the use of technical reference manuals; the diagnosis of malfunctions; the overhaul, repair, and adjustment of units and parts such as pumps, compressors, valves, springs, and connections; and the repair of electric and pneumatic control systems. (See also 16.01 10 00 00 *Environmental-control Technology* under TECHNICAL EDUCATION.)

17.01 01 00 00 **Cooling**—Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of air cooling equipment, including the controls needed for operation.

17.01 02 00 00 **Heating**—Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of heating equipment, including the controls needed for operation.

17.01 03 00 00 **Ventilating (Filtering and Humidification)**—Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various air quality control equipment such as humidifiers, filters, fans, and related equipment.

17.01 99 00 00 **Other Air Conditioning**—Include here other specialized subject matter and learning experiences emphasized in air conditioning, refrigeration, and heating which are not listed above. (Specify.)

17.02 00 00 00 **APPLIANCE REPAIR**
Classroom and shop experiences concerned with the theory of electrical circuitry, simple gearing, linkages, and lubrication in the operation, maintenance, and repair of components including relays, time switches, pumps, and agitators used in appliances such as washers, dryers, vacuum cleaners, toasters, water heaters, and stoves. Related training is provided in the uses of familiar tools, test equipment, and service manuals, and in making cash estimates for repairs.

17.02 01 00 00 **Electrical Appliances**—Learning experiences specifically concerned with the repair, installation, and servicing of electrical appliances.

17.02 02 00 00 **Gas Appliances**—Learning experiences specifically concerned with the repair, maintenance, and servicing of gas appliances.

17.03 00 00 00 **AUTOMOTIVE SERVICES**
Classroom and shop experiences which include training in all phases of automotive maintenance repair work on all types of automotive vehicles. Included is training in the uses of technical manuals and a variety of hand and power tools. Instruction and practice are provided in the diagnosis of malfunctions, disassembly of units, parts inspection and repair or replacement of parts involving engine overhaul and repair, ignition systems, carburetion, brakes, transmissions, front-end alignment, and the installation of a variety of accessories such as radios, heaters, mirrors, and windshield wipers. (See also 10.16 00 00 00 *Power/Automotive Mechanics* under INDUSTRIAL ARTS.)

17.03 01 00 00 **Body and Fender**—Specialized learning experiences concerned with all phases of repairing damaged bodies and fenders including metal straightening by hammering, smoothing areas by filing, grinding or sanding, concealment of imperfections, painting, and replacement of body components, including trim.

17.03 02 00 00 **Mechanics**—Learning experiences concerned with the components of the vehicle, including engine, power transmission, steering, brakes, and electrical systems. Included is training in the use of diagnostic and testing equipment and tools used in the repair process.

17.03 03 00 00 **Specialization** — Learning experiences which emphasize more detailed training in the adjustment and repair of the automobile, including the radiator, transmission, carburetor, brake system, and other units to achieve greater proficiency in the servicing of selected components.

17.03 99 00 00 **Other Automotive Industries**—Include here other organized subject matter and learning experiences emphasized in automotive industries which are not listed above. (Specify.)

17.04 00 00 00 **AVIATION OCCUPATIONS**
Classroom and practical experiences which include instruction relating to aircraft maintenance, aircraft operation, and ground support.

17.04 01 00 00 **Aircraft Maintenance**—Classroom and shop experiences concerned with the inspection, repair, servicing, and overhauling of all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables, and hydraulic units. Learning the use of technical manuals and various kinds of testing equipment is also emphasized.

17.04 01 01 00 AIR FRAME—Specialized classroom and shop experiences concerned with the maintenance and repair of all airplane parts other than engines, propellers, and instruments. Training emphasizes the layout and fabrication of sheet metal and other materials into parts, fittings, and structural members; assembly and installation of structural members; equipment and mechanical parts; and the disassembly and replacement of damaged or worn parts. Training prepares the pupil for the Federal Aviation Agency examination for the air frame mechanic's license.

17 TRADE AND INDUSTRIAL OCCUPATIONS—Continued

17.04 01 02 00 **Power Plant**—Specialized classroom and shop experiences concerned with the maintenance and repair of all types of power plants for aircraft. Course work includes engine inspection and maintenance; lubrication and cooling; electrical and ignition systems; carburetion, fuels, and fuel systems; and propellers. Training prepares the pupil for the Federal Aviation Agency examination for the powerplant mechanic's license.

17.04 01 99 00 **Other Aircraft Maintenance**—Include here other organized subject matter and learning experiences emphasized in aircraft maintenance which are not listed above. (Specify.)

17.04 02 00 00 **Aircraft Operations**—Classroom and practical experiences concerned with the inflight operation of commercial planes, including piloting, navigating, and passenger services, e.g., flight engineer, pilot, and stewardess training.

17.04 03 00 00 **Ground Operations**—Classroom and practical experiences concerned with the ground support of commercial planes, including passenger service, aircraft preflight service, and flight control, e.g., baggage handler, ticket agent, and traffic controller training.

17.05 00 00 00 BLUEPRINT READING

Classroom and practical experiences concerned with visualizing, preparing, developing, and interpreting blueprints. Included for study are the principles of sketching and drawing objects or structures; understanding and utilizing symbols, plans, sections, and details for communicating through blueprints; interpreting blueprints and their related specifications; and translating them into actuality.

17.06 00 00 00 BUSINESS MACHINE MAINTENANCE

Classroom and shop experiences concerned with maintaining and repairing a variety of office machines such as typewriters, dictation machines, and calculators; data processing equipment used for recording and processing data; and duplicating and mailing machines. Instruction includes diagnostic techniques; understanding of mechanical principles such as those involved in gears, cams, levers, and eccentrics; nomenclatures; uses and care of special hand and power tools; soldering; mechanical drawing; principles of electricity and electronics; uses of testing devices; and business procedures and customer relations.

17.07 00 00 00 COMMERCIAL ART OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to the design and execution of layouts and making illustrations for advertising, display, and instructional manuals. Instruction includes advertising theory and preparation of copy, lettering, poster design, fashion illustration, silk screen, air brush and touchup, inks and color dynamics, package and product design, drawings for line and halftone reproduction, and other display devices and exhibits. Instruction leads to preparation for various types of employment such as fashion illustrator, technical illustrator, interior decorator, and advertising artist.

17.07 01 00 00 **Interior Decorating**—Organized learning experiences concerned with the application of art principles to the design, selection, and arrangement of materials and objects in interiors of residential and commercial structures, and in ships and aircraft to achieve esthetic effects or as a media for conveying ideas.

17.07 02 00 00 **Window Display**—Organized learning experiences concerned with the application of art principles to the design, selection, layout, and arrangement of materials and objects for the purpose of attracting attention of customers.

17.07 03 00 00 **Product Design**—Organized subject matter and experiences concerned with application of knowledge of commercial art to the design of commercial products for the purpose of decorative, esthetic effects and current styling consistent with the utilization value of such products. Such occupations also require knowledge of products and production methods.

17.07 99 00 00 **Other Commercial Art Occupations**—Include here other subject matter and learning experiences emphasized in commercial art occupations which are not listed above. (Specify.)

17.08 00 00 00 COMMERCIAL FISHERY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to seamanship, navigation, and communications; utilization of rigging and other equipment; maintenance and repair of boats; techniques for finding fish; shipboard preservation and refrigeration; processing catches afloat and on shore; and operation and maintenance of all fishing gear and power plants. Instruction leads to preparation for various types of employment such as fisherman, processor, weigher, and equipment and special gear maintenance man.

17.08 01 00 00 **Seamanship**—Organized learning experiences concerned with skills of seamanship, including the use and maintenance of line and nets, of navigational aids, and of radio and fundamental electronics equipment; techniques of boat handling, safety and survival at sea, and weather forecasting; and fundamental maintenance of decks and surfaces, engines, and power plants.

17.08 02 00 00 **Ship and Boat Operation and Maintenance**—Organized learning experiences concerned with the planning and supervision of operation, maintenance, and safety of passenger or cargo vessels.

17.08 99 00 00 **Other Commercial Fishery Occupations**—Include here other organized subject matter and learning experiences emphasized in commercial fishery occupations which are not listed above. (Specify.)

17.09 00 00 00 COMMERCIAL PHOTOGRAPHY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and studio work as each relates to all phases of camera uses and photographic processing. Instruction includes composition and color dynamics, contact printing, and enlarging; developing film; air brush and retouching, coloring, and copying; utilization of cameras, meters, and other photographic equipment; portrait, commercial, and industrial photography; and processes such as microfilming and preparing copy for other printing and graphic arts processing.

Instruction also emphasizes the development of skills and knowledge essential for employment in planning, developing, and producing in such areas as audiovisual materials and telecasting, and for employment as a commercial photographer, airbrush man, cameraman (offset printing), audiovisual projectionist, and cameraman (broadcasting).

17.09 01 00 00 **Photographic Laboratory and Darkroom Occupations**—Subject matter and learning experiences concerned primarily with developing and printing photographic still or motion picture film; controlling resultant prints; touch up of negatives; and finishing, coloring, restoring, and copying of prints.

17.09 99 00 00 **Other Commercial Photography Occupations**—Include here other subject matter and learning experiences emphasized in commercial photography which are not listed or classifiable above. (Specify.)

17.10 00 00 00 **CONSTRUCTION AND MAINTENANCE TRADES**

Classroom and shop experiences concerned with the erection, installation, maintenance, or repair of buildings, highways, airports, missile sites, and earth and other structures using assorted materials such as metal, wood, stone, brick, glass, concrete, or composition substances. Instruction is provided in a variety of activities such as cost estimating; cutting, fitting, fastening, and finishing various materials; the uses of a variety of hand and power tools; and blueprint reading and following technical specifications. Knowledge concerning the physical properties of materials is also emphasized.

17.10 01 00 00 **Carpentry**—Classroom and shop experiences involving layout, fabrication, assembly, installation, and repair of structural units. Emphasized in instruction are the care and use of hand and power tools; equipment and materials; common systems of frame construction and the principles involved; and drafting, blueprint reading, applied mathematics, and materials estimating.

17.10 02 00 00 **Electricity**—Classroom and shop experiences concerned with the layout, assembly, installation, testing, and maintenance of electrical fixtures, apparatus, and wiring used in electrical systems. Instruction is provided in the reading, interpretation, and understanding of residential, commercial, and industrial wiring based on controlling electrical codes.

17.10 03 00 00 **Heavy Equipment (Construction)**—Classroom and practical work experiences concerned with the operation, maintenance, and repair of heavy-duty equipment such as bulldozers, cranes, graders, tractors, concrete mixers, crawler-mounted shovels, trailer-mounted compressors, and the gasoline or diesel engines powering the equipment.

17.10 03 01 00 MAINTENANCE—Specialized classroom and practical work experiences concerned with (1) the field maintanance of earthmoving equipment, and (2) the general maintenance and overhaul of such equipment. Instruction covers inspection; maintenance and repair of tracks, wheels, and brakes; operating controls; electrical circuits; engines; and techniques in welding and brazing.

17.10 03 02 00 OPERATION—Specialized classroom and practical work experiences concerned with the uses, care, and operation of a variety of earthmoving equipment such as crawler tractors, motor graders, and motor scrapers; shovels, including dragline and hoe; and cranes. Instruction provides for experiences in digging, ditching, sloping, stripping, grading, back filling, clearing, and foundation excavating.

17.10 04 00 00 **Masonry**—Specialized classroom and shop experiences concerned with the cutting, chipping, and fixing in position of concrete blocks, brick, and glass blocks using bonding materials and hand tools. Included is training in reading architectural plans, planning, and estimating.

17.10 05 00 00 **Painting and Decorating**—Specialized classroom and shop experiences concerned with the preparation and finishing of exterior and interior surfaces by the application of protective or decorative coating materials such as lacquer, paint, and wallpaper. Instruction includes experiences in scraping, burning, or sanding surfaces; making, mixing, and matching paints and colors; and applying coating with brush, roller, or spray gun, or by cutting, pasting, and hanging wallpaper.

17.10 06 00 00 **Plastering**—Specialized classroom and shop experiences concerned with the application of plaster, stucco, and similar materials to interior and exterior surfaces of structuses. Instruction includes the preparation of surfaces and the smoothing and finishing of them.

17.10 07 00 00 **Plumbing and Pipe fitting**—Specialized classroom and shop experiences concerned with layout assembly, installing, altering, and repairing piping systems, including related fixtures and fittings in structures, by the use of pipecutting, bending, and threading tools; welding, soldering, and brazing equipment; and other hand and power tools and equipment.

17.10 08 00 00 **Drywall Installation**—Organized learning experiences concerned with the installation of wallboard, plasterboard, or other interior surfaces of structures.

17.10 09 00 00 **Glazing**—Organized learning experiences concerned with preparing, fitting, and installing glass in structures and other openings of buildings such as windows, doors, and partitions or in objects such as display cases and table tops.

17.10 10 00 00 **Roofing**—Organized learning experiences concerned with covering roofs and exterior walls of structures with waterproofing or insulating materials such as asphalt, aluminum, slate, wood, and related composition materials.

17.10 99 00 00 **Other Construction and Maintenance Trades**—Include here other subject matter and learning experiences emphasized in construction and maintenance trades which are not listed above. (Specify.)

17.11 00 00 00 **CUSTODIAL SERVICES**

Classroom and shop experiences which are concerned with all phases of the care and cleaning of buildings, fixtures, and furnishings, including all types of building

17 TRADE AND INDUSTRIAL OCCUPATIONS—Continued

interiors such as linoleum, plastic, terrazzo, tile, and wood floors; rugs; and plastic, wood panel, paint, and synthetic wall coatings. Skills are taught in the use and care of hand and power tools of such operations as dusting, dust mopping, wet mopping, scrubbing, waxing, and refinishing, and the cleaning of toilet rooms, windows, and walls.

Additional emphasis is on (1) characteristics of various cleaning agents and protective coatings—including their reactions on surfaces—and procedures of applying them; (2) sanitation and disinfectants; (3) scheduling work, and (4) purchasing custodial supplies.

17.12 00 00 00 **DIESEL MECHANIC**

Classroom and shop experiences which are concerned with all phases of repair work on diesel engines used to power buses, ships, trucks, railroad trains, electric generators, construction machinery, and similar equipment. Instruction and practice are provided in the diagnoses of malfunction; disassembly of engines and examination of parts; reconditioning and replacement of parts; repair and adjustment of fuel injection systems, oil and water pumps, generators, governors, auxiliary and accompanying power units, controls, and transmissions. The uses of technical manuals, a variety of hand and power tools, and testing and diagnostic equipment are also studied.

17.13 00 00 00 **DRAFTING OCCUPATIONS**

Organized specialized learning experiences which emphasize theory, use of the drafting room, and laboratory and shopwork as each relates to gathering and translating data or specifications, including the aspects of planning, preparing, and interpreting mechanical, architectural, structural, pneumatic, marine, electrical/electronic, topographical, and other drawings and sketches. Instruction is designed to provide experiences in drawing; in the use of reproduction materials, equipment, and processes; the preparation of reports and data sheets for writing specifications; the development of plan and process charts and drawings; and the development of models.

Instruction emphasizes the development of skills and knowledge essential for employment in ancillary capacities such as tracers or reproduction equipment operators, and for occupations such as mechanical draftsman, structural draftsman, detailer, marine draftsman, tool designer, fixture designer, and punch and die designer. (See also 10.03 00 00 00 *Drafting* under INDUSTRIAL ARTS.)

17.14 00 00 00 **ELECTRICAL OCCUPATIONS**

Organized subject matter and experiences which include theory, laboratory, and shopwork as each relates to planning functions, generating and transmitting electricity, installing and maintaining electrical and communications systems, and equipment and components. Instruction emphasizes practical applications of mathematics, the sciences, circuit diagrams and blueprint reading, sketching, and other subjects essential to preparation for employment in the electrical occupations. (See also 10.04 00 00 00 *Electricity/Electronics* under INDUSTRIAL ARTS.)

17.14 01 00 00 **Industrial Electrician**—Specialized classroom and practical instruction related to the maintenance and repair of a variety of industrial machinery driven by electric motors, or which are electrically controlled.

17.14 02 00 00 **Lineman**—Specialized classroom and practical experiences concerned with the installation and operation and maintenance of local, long-distance, and rural lines, including pole- and tower-line erection and construction.

17.14 03 00 00 **Motor Repairman**—Specialized classroom and practical experiences concerned with the assembly, installation, testing, maintenance, and repair of electric motors, generators, transformers, and related equipment.

17.14 99 00 00 **Other Electrical Occupations**—Include here other subject matter and learning experiences emphasized in electrical occupations which are not listed above. (Specify.)

17.15 00 00 00 **ELECTRONICS OCCUPATIONS**

Organized specialized learning experiences which include theory, laboratory, and shopwork as each relates to planning, producing, testing, assembling, and installing and maintaining electronic communications equipment such as radio, radar, and television; industrial electronic equipment, including digital computers; new electronic systems, components, and equipment; and control devices. Emphasis is on solid-state devices and components, electron tube characteristics, low-frequency amplifiers, LC and RC Oscillators, transistors, and amplitude and frequency modulation. Instruction is designed to develop knowledge, understanding, and skills essential for employment in communications, industrial electronics, radio/television, and other electronics occupations. (See also 10.04 00 00 00 *Electricity/Electronics* under INDUSTRIAL ARTS.)

17.15 01 00 00 **Communications**—Specialized classroom and practical experiences concerned with the assembly, installation, operation, maintenance, and repair of communications equipment and systems of all types, e.g., industrial and entertainment sound systems, data processing, telephone dial systems, two-way radio, central circuits, hearing aids, and high-fidelity receiving sets.

17.15 02 00 00 **Industrial Electronics**—Specialized classroom, laboratory, and practical experiences which are concerned with the basic elements of vacuum tubes and circuitry; using and servicing testing equipment and troubleshooting circuits; the study of and experience in repairing photoelectric controls, timers, selector switches, counters, recorders, and transducers; solid-state devices and components; the study of the characteristics and intricacies of equipment and components used in industry and research centers.

More advanced instruction includes study, analysis, and repair of magnetic amplifiers, motors, motor controls, electronic heating, saturable reactors, servomechanisms, pulse circuits, computers, and test instruments—including basic principles and servicing procedures. Field trips are frequently emphasized.

17.15 03 00 00 **Radio/Television**—Specialized theory and practice which are concerned with the construction, maintenance, and repair of radios and television sets. Training also prepares pupils to diagnose troubles and make repairs on other electronic products such as high-fidelity sound equipment, phonographs, and tape recorders.

17.15 99 00 00 **Other Electronics Occupations**—Include here other subject matter and learning experiences emphasized in electronics occupations which are not listed above. (Specify.)

17.16 00 00 00 FABRIC MAINTENANCE SERVICES

Classroom and laboratory experiences which are concerned with all phases of maintenance service on all types of fabrics. Instruction emphasizes identifying, marking and entering, sorting, assembling, wrapping, and bagging clothing and other fabrics; a wide range of information dealing with drycleaning and spotting agents, detergents, bleaches, and dyes; effects of heat on various fabrics; skills involved in the use of hand tools and power equipment such as power presses for flat work, roller presses, washers, extractors, and dryers; and alteration and repair of fabrics.

17.16 01 00 00 **Drycleaning**—Classroom and practical experiences concerned with theory and knowledge in drycleaning plant management and processes. Instruction includes receiving garments, inspecting, dry and wet cleaning, identifying spots and spotting, pressing, dyeing, and sorting and wrapping wearing apparel, household furnishings, and other articles of textile construction or leather. Also emphasized are experiences concerned with various cleaning agents, kinds of fabrics, alteration and repair of articles, and uses of hand and power tools and equipment.

17.16 02 00 00 **Laundering**—Classroom and practical experiences concerned with theory and knowledge in laundering plant management and processes. Instruction includes receiving garments, inspecting, washing fabrics, spotting, ironing and pressing, dyeing, bleaching, sorting, and folding and wrapping wearing apparel and household and other articles of textile construction. Also emphasized are experiences concerned with various cleaning agents (including detergents), types of fabrics, and uses of hand and power tools and equipment.

17.16 99 00 00 **Other Fabric-maintenance Services**—Include here other subject matter and experiences emphasized in fabric-maintenance services which are not listed above. (Specify.)

17.17 00 00 00 FOREMANSHIP, SUPERVISION, AND MANAGEMENT DEVELOPMENT

Planned learning experiences designed to assist the supervisor in effectively utilizing the men, machines, and materials under his supervision by broadening his background knowledge and developing his leadership abilities. Included is the study of human behavior, organization and management, oral communication, labor laws, personnel procedures, job analysis, work simplification, employee utilization, and the development of writing techniques as applied to the preparation of letters, memos, and technical reports, speedreading, and safety and first-aid practices.

17.18 00 00 00 GENERAL CONTINUATION

(For description see X 02 45.23 *General Continuation Class*, page 62.)

17.19 00 00 00 GRAPHIC ARTS OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to all phases of hot and cold typesetting, layout, composition, presswork, and binding, including flexography, lithography, photoengraving, and other graphic arts related to the printing industry. Emphasis is on typographical layouts and design, hand and machine typesetting, camera and plate work, imposition, typecasting, offset and platen press makeup and operation, papercutting, ink and color preparation, binding, and production by silkscreen process. Instruction leads to preparation for various types of employment such as typesetter, compositor, cameraman, platemaker, cost analyst, expediter, and production planner.

17.19 01 00 00 **Composition, Makeup, and Typesetting**—Organized learning experiences concerned with layout, composition, makeup, and hand and machine typesetting and typecasting.

17.19 02 00 00 **Printing Press Occupations**—Organized learning experiences concerned with making ready, operating, and maintaining printing presses.

17.19 03 00 00 **Lithography, Photography, and Platemaking**—Organized learning experiences concerned with lithography, lithographic photography, stripping, and related platemaking processes.

17.19 04 00 00 **Photoengraving**—Organized learning experience concerned with photographing illustrations and other copy that cannot be set up in type, developing negatives, and preparing photosensitized metal plates for use in printing.

17.19 05 00 00 **Silk Screen Making and Printing**—Organized learning experiences concerned with the preparation of silk screens and the operations of silk screen printing.

17.19 06 00 00 **Bookbinding**—Organized learning experiences concerned with gathering pages, forms, and related materials and assembling them into books or pamphlets. Included are techniques concerned with binding and repairing books and documents.

17.19 99 00 00 **Other Graphic Arts**—Include here other subject matter and learning experiences emphasized in graphic arts which are not listed above, including those involving new methods and technologies. (Specify.)

17.20 00 00 00 INDUSTRIAL ATOMIC ENERGY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to (1) the construction, operation, and maintenance of reactor plants and industrial "X-ray" equipment, and (2) the industrial uses of radioisotopes for production and control operations. Almost every form of mechanical, electrical, electronic, and chemical skills and equipment generally used in industry may be involved.

17.20 01 00 00 **Installation, Operation, and Maintenance of Reactors**—Organized learning experiences which are concerned with atomic reactor plants and their use. Emphasized in addition to the knowledge and skills required in general construction of reactor plants are the related factors of reactor theory, operating characteristics and limitations, instrumentation, radiation hazards, maintenance, and emergency and safety procedures.

17.20 02 00 00 **Radiography**—Organized learning experiences which are concerned with the installation, safe operation, interpretation, and maintenance of industrial "X-ray" equipment. Training also includes atomic theory, operating procedures, radiation protection standards and instruments, photographic film, and interpretation of film exposures.

17.20 03 00 00 **Industrial Uses of Radioisotopes**—Organized learning experiences which are concerned with the industrial use of radioisotopes in production and control operations. Training also includes atomic theory, electrical and electronic theory, operating procedures, specialized instrumentation, radiation protection, process and quality controls, interpretation, and recordkeeping.

17.20 99 00 00 **Other Industrial Atomic Energy Occupations**—Include here other subject matter and experiences emphasized in industrial atomic energy occupations which are not listed above. (Specify.)

17.21 00 00 00 **INSTRUMENT MAINTENANCE AND REPAIR OCCUPATIONS**

Classroom, laboratory, and practical experiences concerned with maintaining and repairing meters, instruments, watches and clocks, and other physical measuring devices. Instruction includes experiences in diagnosing malfunctions, disassembling, repairing and/or replacing faulty parts, cleaning, assembling and adjusting, and using special bench and hand tools, meters, and standards.

17.21 01 00 00 **Instruments (other than watches and clocks)**—Classroom, laboratory, and practical experiences concerned with maintaining and repairing various types of meters and other types of measuring and control devices, e.g., heating and air-conditioning controls; dial pressure gauges; scales and balances; electrical controlling, measuring, and recording devices; optical instruments; and navigational and aeronautical instruments. Instruction includes experiences in diagnosing malfunctions, disassembling, repairing and/or replacing faulty parts, cleaning, assembling and adjusting, and using special bench and handtools, meters, and standards.

17.21 02 00 00 **Watchmaking and Repair**—Classroom, laboratory, and practical experiences concerned with making, maintaining, and repairing clocks, watches, chronometers, and similar types of time-measuring devices. Instruction includes training in diagnosing malfunctions; disassembling and repairing or replacing faulty parts; cleaning, assembling, and adjusting parts; estimating repair costs; and replacing straps and bands, crystals, crowns, and hands. The various kinds and uses of special watchmaker's bench and hand tools, e.g., lathe, staking tool, loupe, pliers, truing calipers, poising tool, timing machine, tweezers, soldering devices, pallet warmer for burnishing, and grinding, drilling, and polishing tools and devices are included in instruction. Cleaning and performing other operations are emphasized as well as the types and uses of various materials including metals, plastics, chemicals, oils, waxes, and abrasive powders.

17.22 00 00 00 **MARITIME OCCUPATIONS**

Classroom, laboratory, theory, and practical experiences concerned with preparation for the performance of tasks on fresh-water and seagoing ships, tugboats, barges, floating drydocks, and other marine craft and floating structures, as well as related harbor and dock machinery and equipment. Firefighting, lifeboat work, and swimming are taught to all pupils. Emphasis is on fiber and wire rope handling and splicing, chipping and painting the hull, cargo handling gear and ground tackle, and watchstanding and lookout in the deck department; maintenance, operation, repair, and servicing main engines and auxiliary steam, refrigeration, water, and electrical systems in the engine department; and storekeeping, food preparation and service, and cabin upkeep in the steward department.

Instruction leads to preparation for various types of employment, such as able-bodied seaman, ship's carpenter, deck-maintenance man, quartermaster and boatswain, oiler, fireman-watertender, electrician, junior engineer, cook, chief steward, and wiper (engineroom), as well as employment ashore, e.g., stationary engineer, cargo handling or rigging operations.

17.23 00 00 00 **METALWORKING OCCUPATIONS**

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, bent, pressed, stamped, fused, marked, or otherwise worked upon.

Instruction emphasizes the acquisition of knowledge, skills, and understanding which lead to preparation for various types of skilled and semiskilled employment such as sheetmetal man, toolmaker, foundryman, welder, millwright, production machine-tool operator, production molder, metal-stamping operator, and metal patternmaker, as well as helper-type jobs such as materials handler, and machine cleanup man.

17.23 01 00 00 **Foundry**—Specialized classroom and shop experiences designed to provide knowledge of the theory and applications of foundry practice in ferrous and nonferrous foundries. Instruction emphasizes foundry equipment, various sands and refractories, sand and machine molding, foundry chemistry and metallurgy, coremaking, chipping, and grinding.

17.23 02 00 00 **Machine Shop**—Specialized classroom and shop experiences concerned with all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds, and speeds of machining. Also emphasized are: work on the bench, and on lathes, shapers, milling machines, grinders and drills; the uses of precision measuring instruments such as layout tools, micrometers, and gages; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares the pupil to operate and repair all machines.

17.23 03 00 00 **Machine Tool Operation**—Specialized learning experiences designed to prepare a semiskilled worker to run only one machine, e.g., lathe, grinder, drill press, milling machine, or shaper.

17.23 04 00 00 **Metal Trades (combined)**—Specialized learning experiences designed to prepare an all-round metalworker capable of fabricating and assembling a variety of products in many industries. Instruction includes layout; sequence of operations; setting up and operating fabricating machines; positioning, aligning, fitting, and welding parts together; and designing and constructing templates and fixtures.

17.23 05 00 00 **Sheet Metal**—Specialized classroom and shop experiences concerned with the layout, fabrication, erection or installation, and maintenance of items made of steel, copper, stainless steel, and aluminum such as ventilating, air conditioning, and heating ducts, kitchen equipment, signs, furniture, and skylights. Instruction emphasizes the use of handtools and machines such as the cornice brake, forming rolls, and squaring shears; drafting; and blueprint reading.

17.23 06 00 00 **Welding and Cutting**—Specialized classroom and shop experiences concerned with all types of metal welding, brazing, and flame cutting. Instruction emphasizes properties of metals, blueprint reading, electrical principles, welding symbols, and mechanical drawing.

17.23 06 01 00 Gas Welding—Specialized classroom and shop learning experiences concerned with the use of gas welding equipment to weld metal parts together and planning and laying out work from drawings, blueprints, or other written specifications.

17.23 06 02 00 Electric Welding—Specilaized classroom and shop learning experiences concerned with the use of arc and other electric welding equipment to weld metal parts together, as specified by drawings, blueprints, or other written specifications. Instruction is also given in inert-gas shielded arc welding with manually operated torch and semiautomatic gun.

17.23 06 03 00 Combination Welding—Specialized classroom and shop learning experiences concerned with the use of both gas welding and any combination of arc welding processes to weld metal parts together, according to diagrams, blueprints, or other written specifications.

17.23 06 04 00 Brazing and Soldering Operations—Specialized classroom and shop learning experiences concerned with setting up and operating induction heating equipment to braze (bond) together metal components, including instruction in the use of blueprints and electric or gas-fired ovens and equipment.

17.23 06 99 00 Other Welding and Cutting—Include here other subject matter and experiences emphasized in welding and cutting which are not listed above. (Specify.)

17.23 07 00 00 **Tool and Die Making**—Organized classroom and shop learning experiences concerned with analyzing specifications, laying out metal stock, setting up and operating machine tools, and fitting and assembling parts to make and repair metalworking dies, cutting tools, jigs, fixtures, gages, and machinists' handtools, including instruction in the application of tool-and-die designs and construction, shop mathematics, metal properties, and layout, machining, and assembly procedures.

17.23 08 00 00 **Die Sinking**—Organized classroom and shop learning experiences concerned with laying out, machining, and finishing impression cavities in die blocks to produce forging dies, including instruction in the use of blueprints and methods of die sinking.

17.23 09 00 00 **Metal Patternmaking**—Organized classroom and shop learning experiences concerned with fitting, assembling, and hand-finishing castings and parts in making metal foundry patterns, including instruction in the use of handtools and analysis of specifications according to patternmaking methods.

17.23 99 00 00 **Other Metalworking Occupations**—Include here other organized subject matter and learning experiences emphasized in metal-working occupations which are not listed above. (Specify.)

17.24 00 00 00 **METALLURGY OCCUPATIONS**

Classroom and laboratory experiences concerned with assisting in examining and testing metal samples under the direction of physical metallurgists for determining the physical properties of metals, e.g., crystalline structure, porosity, homogeneity, and other characteristics. Instruction includes examining metals with x-ray, gamma ray, and magnetic-flux equipment for detecting defects, and the use of pressure devices, hot-acid baths, and other apparatus to test hardness, toughness, and other properties of metals. (See also 16.01 14 00 00 *Metallurgical Technology* under TECHNICAL EDUCATION.)

17.26 00 00 00 **PERSONAL SERVICES**

Planned learning experiences concerned with rendering a variety of personal services related to the physical appearance of individuals. These experiences include giving various kinds of beauty treatment, applying makeup to faces of studio and stage performers, attending clients taking baths, administering elementary massage, and fitting wigs.

17.26 01 00 00 **Barbering**—Classroom and practical experiences concerned with haircutting and styling, shaving, shampooing, and massaging. Emphasis is on hygiene, skin and scalp diseases, and sterilization of instruments and utensils. Instruction is designed to qualify pupils for licensing examinations.

17.26 02 00 00 **Cosmetology**—Classroom and practical experiences concerned with a variety of beauty treatments, including the care and beautification of the hair, complexion, and hands. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, and bleaching; permanent waving; facials; and manicuring and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management (including keeping records), and customer relations are also emphasized. Instruction is designed to qualify pupils for the licensing examination.

17 TRADE AND INDUSTRIAL OCCUPATIONS—Continued

17.26 99 00 00 **Other Personal Services**—Include here other organized subject matter and learning experiences emphasized in personal services which are not listed above. (Specify.)

17.27 00 00 00 **PLASTICS OCCUPATIONS**

Classroom and shop experiences dealing with plastics and their characteristics, and with bench molding, fitting, internal carving, and finishing plastic and fiberglass materials into products. Instruction includes using hand and power tools.

17.28 00 00 00 **PUBLIC SERVICE OCCUPATIONS**

Planned learning experiences concerned with training for the performance of occupations in local, State, and Federal government agencies. These occupations usually are concerned with specialized activities limited to local, county, State, and Federal governments, and do not occur elsewhere in the economy. Typical activities include police and fire protection, emergency and rescue squad work, safety, sanitation, transportation, and school bus driving.

17.28 01 00 00 **Fireman Training**—Specialized class and practical experiences concerned with the practices and techniques of firefighting. Instruction treats the organization of a community fire department; the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment and aids and their uses, such as extinguishers, pumps, hose, rope, ladders, gas masks, hydrants, and standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage equipment and work; fire and arson investigation; inspection techniques; and radiation hazards.

17.28 02 00 00 **Law Enforcement Training**—Specialized class and practical experiences designed to supplement the training provided by officially designated law enforcement agencies. Instruction includes acquiring and maintaining the uniform; patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; making arrests; and testifying in court.

17.28 99 00 00 **Other Public Service Occupations**—Include here other organized subject matter and learning experiences emphasized in public service occupations which are not listed above. (Specify.)

17.29 00 00 00 **QUANTITY FOOD OCCUPATIONS**

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to planning, selecting, purchasing, preserving, preparing, and serving food and food products. Included is the study of a variety of foods and their nutritional values, food processing, quantity cooking, storing equipment, and sanitation in food handling and management.

Instruction emphasizes quantity food service occupations in commercial food service establishments such as restaurants, cafeterias, drive-ins, tearooms, bakeries, and meat, fish, and poultry markets; in other retail food shops which are operated independently or are located in enterprises such as hotels, travel terminals, industrial plants, hospitals, or clubhouses; and in special food services such as those associated with airline catering or with takeout food establishments. Instruction is designed to prepare pupils for occupations such as baker, cook, chef, and meatcutter, or in planning, purchasing, preparing, storing, and preserving foods, or for services such as busboy, waiter, or waitress. (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 09.02 03 00 00 *Food Management, Production, and Services* under HOME ECONOMICS.)

17.29 01 00 00 **Baker**—Specialized classroom and practical work experiences associated with the preparation of bread, crackers, cakes, pies, pastries, and other bakery products for retail distribution or for consumption in a commercial food service establishment. Instruction includes making, freezing, and handling of bake products; decorating; counter display; and packaging of merchandise. Training prepares the pupil as an all-round baker, although he may be employed in the production of any one type of goods such as pastries.

17.29 02 00 00 **Cook/Chef**—Specialized classroom and practical work experiences concerned with the preparation and cooking of a variety of foods. Included is study of the use and care of equipment; food standards such as the selection and preparation of food and the determination of size of servings; sanitation procedures, including food handling; cooking methods such as broiling and steaming; and preparation of special dishes such as soups, salads, garnishes, souffles, and meringues. Although the pupil qualifies as an all-round worker, he may, depending on the size of the establishment, specialize in preparation of specific types of foods, e.g., meats, vegetables, or sauces.

17.29 03 00 00 **Meat Cutter**—Specialized classroom and practical work experiences concerned with the cutting, trimming, and preparation of carcasses and consumer-size portions for sale by wholesale or retail establishments, or for cooking in a food service establishment. Instruction is provided in the use of certain meatcutting tools, identification of and techniques used in cutting different cuts of meats, dressing poultry, processing fish, counter display, and refrigeration of meats, poultry, and fish.

17.29 04 00 00 **Waiter/Waitress**—Specialized classroom and practical work experiences in table preparation, food handling, and serving. Instruction is provided in personal cleanliness and appearance, sanitary handling of food and equipment, setting a table, receiving and seating guests, taking orders and interpreting the menu, carrying the tray and dishes, placing orders in the kitchen, serving procedures, making out checks, accepting money and making change for checks, and proper relations with fellow employees and customers.

17.29 99 00 00 **Other Quantity Food Occupations**—Include here other organized subject matter and learning experiences emphasized in quantity food occupations which are not listed above. (Specify.)

17.30 00 00 00 **REFRIGERATION**

Classroom and shop experiences concerned with commercial chilling and freezing systems, including theory, application, and operation of compressors, expansion and float valves, thermostats, and pressure controls; diagnosing, overhauling, and testing methods and procedures; charging and discharging systems with refrigerants; and testing hermetic units, relays, and overload devices.

17.31 00 00 00 **SMALL ENGINE REPAIR (INTERNAL COMBUSTION)**

Classroom and shop experiences concerned with maintaining and repairing a variety of small engines used on portable power equipment, e.g., lawnmowers, outboard motorboats, chain saws, and Rototillers. Instruction includes principles of internal-combustion engine operation, reading technical manuals, and customer relations.

17.32 00 00 00 **STATIONARY ENERGY SOURCES OCCUPATIONS**

Organized specialized learning experiences, including theory, laboratory, and shopwork as each relates to the installation, operation, and maintenance of large power sources for purposes such as generating electricity, pumping, and heating. Major equipment involved may be turbines (steam, gas, or hydro), engines (diesel or gas), atomic reactors, or furnaces.

17.32 01 00 00 **Electric Power Generating Plants**—Organized learning experiences concerned with the installation, operation, and maintenance of electric power generating stations from which the electricity may be either for sale or industrial use. Instruction, in addition to that required in general construction, also includes theory, operation, and maintenance of gas, oil, or coal furnaces; atomic reactors; boilers; electrical generators; steam, gas, hydroturbines, and diesel engines; special instrumentation; control; and emergency and safety procedures. Occupational preparation may be designed to provide specialization for a specific type of electric power generating plant construction or operation, e.g., steam, hydro, atomic, diesel, or gas turbine.

17.32 02 00 00 **Pumping Plants**—Organized learning experiences concerned with the installation, operation, and maintenance of pumping installations handling liquids, gases, or solids for remote delivery through pipelines or for local use. Pumps are commonly driven by electric motors, diesel engines, or gas turbines. Instruction includes theory, operation, and maintenance of pumps, pipelines, motors, engines, and gas turbines as well as instrumentation and control.

17.32 99 00 00 **Other Stationary Energy Sources Occutions**—Include here other organized subject matter and learning experiences emphasized in stationary energy-sources occupations which are not listed above. (Specify.)

17.33 00 00 00 **TEXTILE PRODUCTION AND FABRICATION**

Classroom and shop experiences concerned with all aspects of the fabrication of textiles and kindred materials. Instruction emphasizes the fabrication and repair of garments constructed of cotton, wool, synthetic fibers, or fur; apparel accessories, e.g., handbags, belts, shoes, and gloves; white goods such as sheets and pillowcases and furnishings, such as slipcovers, drapes, and curtains. (See also 09.02 02 00 00 *Clothing Management, Production, and Services* under HOME ECONOMICS.)

17.33 01 00 00 **Dressmaking**—Specialized classroom and laboratory experiences concerned with the construction, alteration, and fitting of women's apparel such as dresses, coats, and suits. Instruction includes sketching; style, line, and color in fashion design; patternmaking; cutting fabric to patterns; draping; machine and handstitching; altering finished garments, including cleaning and pressing; classification, identification, and selection of fabrics.

17.33 02 00 00 **Tailoring**—Specialized learning experiences concerned with the fabrication and alteration, by hand and machine, of all types of men's, women's, and children's outer garments. Instruction includes taking measurements, preparing patterns, cutting, sewing, and fitting; hand and powered-machine sewing; hand and machine pressing; and making repairs and alterations from start to finish, according to patterns and the designer's specifications.

17.33 99 00 00 **Other Textile Production and Fabrication**—Include here other organized subject matter and learning experiences emphasized in textile production and fabrication which are not listed above. (Specify.)

17.34 00 00 00 **LEATHERWORKING**

Classroom and shop experiences concerned with the fabrication and repair of all types of leather and artificial leather products. Instruction emphasizes types and care of footwear, e.g., shoes, boots, moccasins, sandals, and slippers; kinds and uses of tools and machines; shoe construction; shoe repairing, including replacement of worn parts such as heels and soles, and sewing parts that need mending; orthopedic shoemaking and repair; leather refinishing and dyeing; salesmanship; and simple bookkeeping. Repairing of other articles such as handbags, luggage, and belts may be included in instruction.

17.34 01 00 00 **Shoe Manufacturing**—Organized classroom and shop learning experiences concerned with the fabrication of all types of footwear, including orthopedic shoes. Instruction emphasizes the various parts of the shoe, types of shoes, and the different operations related to the making of shoes; the characteristics of leather; leather finishing; and the use of power sewing, cutting, and trimming machinery.

17.34 02 00 00 **Shoe Repair**—Organized classroom and shop learning experiences concerned with the repair of all types of footwear. Instruction emphasizes types and care of shoes; kinds and uses of tools and machines; shoe construction; shoe repairing, including replacement of worn parts such as heels and soles, and sewing parts that need mending; orthopedic shoemaking and repair; leather refinishing and dyeing; salesmanship and simple bookkeeping. Repairing of other articles, such as handbags, luggage, and belts may be included in instruction.

17.34 99 00 00 **Other Leatherworking**—Include here other subject matter and experiences emphasized in leatherworking which are not listed or classifiable above. (Specify.)

17.35 00 00 00 **UPHOLSTERING**

Classroom and shop experiences concerned with all aspects of upholstering, in-

17 TRADE AND INDUSTRIAL OCCUPATIONS—Continued

cluding furniture, automobile seats, caskets, mattresses, and bedsprings. Instruction includes history and styles of furniture; installing, repairing, arranging, and securing springs, filler, padding, and covering material; patternmaking; cutting, sewing, and trimming outside coverings; cushion filling; styling and designing; tufting and buttoning; and wood refinishing.

17.36 00 00 00 **WOODWORKING OCCUPATIONS**
Classroom and shop experiences concerned with woodworking occupations other than construction carpentry. Instruction emphasizes laying out and shaping stock; assembling complete wooden articles or subassemblies; marking, binding, sawing, carving, and sanding wood products; and repairing wooden articles. Also emphasized are various hand and power tools and their uses.

17.36 01 00 00 **Millwork and Cabinet Making**—Specialized class and practical work experiences concerned with mass production of products such as window frames, moldings, trim, and panels; and with making such products as furniture, store fixtures, kitchen cabinets, and office equipment. Instruction includes training in cutting, shaping, and assembling parts by means of handtools and woodworking machines; refinishing furniture; installation of hardware, e.g., hinges, catches, and drawer pulls; planning layouts; blueprint reading; drafting; and various kinds of woods.

17.36 99 00 00 **Other Woodworking Occupations**—Include here other organized subject matter and learning experiences emphasized in woodworking occupations which are not listed above. (Specify.)

17.99 00 00 00 **OTHER TRADE AND INDUSTRIAL OCCUPATIONS**
Include here other organized subject matter and learning experiences emphasized in trade and industrial occupations which are not listed or classifiable in one of the above major categories. (Specify.)

GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION

18.00 00 00 00

The terms General Elementary Education and General Secondary Education, as classified in chapter 5 and defined in chapter 6 of this handbook, usually refer to instruction which takes place in a self-contained class. Learning experiences are concerned with the knowledges, skills, appreciations, attitudes, and behavioral characteristics considered to be needed by all pupils in terms of the broad educational outcomes which should be achieved by all pupils to the limits of their capacities during the elementary and secondary school years or grades.

The Ad Hoc Committee for General Elementary Education and General Secondary Education applied the following rationale to the selection of items for placement in the General Elementary Education and General Secondary Education area: (1) the items were determined by consensus of the committee to be appropriate in terms of types of instructional organization; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various types of instructional organization classified were identifiable by titles which the committee considered to be most commonly used in current practice.

The items of information in chapters 3 and 4 are supportive to general elementary education and general secondary education instructional programs. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under the heading of General Elementary Education and General Secondary Education are items of information which identify selected types of instructional organizations for carrying on instruction.

18.01 00 00 00 **GENERAL ELEMENTARY YEARS OR GRADES**
Usually includes education in the prekindergarten, kindergarten, and years or grades 1 through 6, 7, or 8. In practice, instruction usually takes place in a self-contained class.

18.01 01 00 00 **Early Elementary Years or Grades; Early Childhood Education**—Includes instruction at the preprimary and primary levels. In practice, instruction usually takes place in a self-contained class.

18.01 01 01 00 PREPRIMARY LEVEL—Includes education during the year or years preceding the first grade. A prekindergarten or kindergarten class may be organized as a grade of an elementary school which includes the primary level, or it may be a part of a separate school. In some school systems such a group is called junior primary.

18.01 01 02 00 PRIMARY LEVEL (INCLUDING GRADES 1, 2, AND 3 OR EQUIVALENT)—Includes education during the years or grades preceding the intermediate elementary grades, usually years or grades 1, 2, and 3 or the equivalent.

18.01 01 99 00 OTHER EARLY ELEMENTARY ORGANIZATIONS—Include here any arrangement of early elementary years or grades not classified above. (Specify.)

18.01 02 00 00 **Intermediate Elementary Level (including years or grades 4, 5, and 6 or equivalent)**—Usually includes education in the years or grades 4, 5, and 6 or the equivalent. In practice, instruction frequently takes place in a self-contained class.

18.01 03 00 00 **Upper Elementary Level (including years or grades 7 and 8 or equivalent)**—Usually includes education in the years or grades 7 and 8 or the equivalent.

18.01 99 00 00 **Other Plan for General Elementary Years or Grades**—Include here any arrangement of elementary grades or years not classified above. (Specify.)

18.02 00 00 00 **MIDDLE SCHOOL LEVEL**
A separately organized and administered school usually beginning with grades 5 or 6 or its equivalent and including at least 3

18 GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION—Continued

grades or years. Most middle schools presume, in ultimate plan if not in present reality, a four-year high school for the grades or years which follow, as in a 4-4-4 plan or a 5-3-4 plan.

18.03 00 00 00 **GENERAL SECONDARY YEARS OR GRADES**
Any span of years or grades beginning with the next year or grade following the elementary school and usually ending with or below year or grade 12, including the junior high school and other types of high school.

18.03 01 00 00 **Junior High School Level**—A separately organized and administered secondary school intermediate between the elementary and senior high school, usually including years or grades 7, 8, and 9 (in a 6-3-3 plan) or years or grades 7 and 8 (in a 6-2-4 plan).

18.03 02 00 00 **Senior High School Level**—A secondary school offering the final years or grades of high school work necessary for graduation and invariably preceded by a junior high school.

11.03 99 00 00 **Other Secondary School Level**—Include here any arrangement of secondary school years or grades not classified above. (Specify.)

DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS

19.00 00 00 00

The differentialized curriculum for handicapped pupils reflects an increasing awareness today of the *individual* needs of children. Many children with various types of handicaps cannot benefit from *basic* subject matter without special education. Handicapped children present learning difficulties, sensory and motor impairments, which require careful study for successful adaptation of instruction. Teachers of exceptional children integrate professional information from psychology, education, and medicine for instructional and therapeutic services. Consequently, special education as applied to each type of handicapped child has developed some distinctive techniques and materials which distinguish it from regular classroom instruction.

All handicapped children should have appropriate educational opportunities. As the school shares the responsibility with other social institutions for educating all children, it may make a unique contribution in discovering handicaps and providing the needed services for supporting the type of instruction which will enable pupils to fulfill their maximum potential. The majority of pupils with mild or uncomplicated handicaps can be served best within normal classes for instruction. Those pupils whose handicaps are of such nature and degree as to interfere with intellectual development and learning under regular class methods will require differentialized curriculum for some part of, and, frequently, for all of their education.

The Ad Hoc Committee for Differentialized Curriculum for Handicapped Pupils applied the following rationale to the selection of the items for placement in the area: (1) the items were determined by consensus of the committee to be appropriate to the area in terms of selected techniques, materials, and services essential to meeting the needs of pupils having varied handicaps; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified under Differentialized Curriculum for Handicapped Pupils were identifiable by titles which the *ad hoc* committee considered to be currently in use and accepted in practice.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78; the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96; and the items classified in the X 09 00. Series—Pupils served by Program of Studies on pages 80–83, e.g., mentally retarded, blind, hard of hearing, speech impaired, crippled. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

19.01 00 00 00 **COMMUNICATION SKILLS**
Activities concerned with learning and using oral, written, and visual language for interrelating with others in the environment.

19.01 01 00 00 **Language Stimulation**—An organized activity designed for assisting pupils learning to respond to a wide range of stimuli through ordinary channels of communication. Provision is made for the pupil to learn language in a developmental way, depending upon the type of stimuli or conditioning he receives.

19.01 02 00 00 **Language Development**—Activities designed to provide for a continuous, sequential system of learning the spoken and written language for communicative purposes.

19.01 03 00 00 **Language Correction**—Learning activities designed to change faulty language patterns which have already been formed. This involves a need for change in the existing language behavior as opposed to language development.

19.01 04 00 00 **Speech Stimulation**—Learning activities which involve the conditioning of speech and language learning by others in the environment. Maximum stimulation provides a direct aid to the speech development process.

19.01 05 00 00 **Speech Development**—The speech and language learning process which usually proceeds from unrelated sounds through several stages until the spoken words have a mutual meaning to the speaker and to the people in the learning environment. Some developmental teaching is done in this same manner.

19.01 06 00 00 **Speech Correction**—The remedial process of helping a person overcome his speech deviation. This involves a methodical process of teaching speech and integrating the changed speech pattern into the person's communicative skills.

19 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS—Continued

19.01 07 00 00 **Special Communication Methods**—Special methods, other than speech and written language, used by handicapped persons for communicating with others in their environment. These methods are also used as tools in teaching language to the handicapped.

19.01 07 01 00 Braille Reading and Writing—A system designed to teach blind persons to read and write through the use of embossed characters formed by dots.

19.01 07 02 00 Stimulus Magnification (Vision)—A type of mechanical magnification used to increase a visual stimulus in order to make it possible for an individual with impaired sight to deal more extensively with his environment.

19.01 07 03 00 Stimulus Magnification (Hearing)—A type of mechanical amplification used to increase the auditory stimulus in order to make it possible for an individual with impaired hearing to deal more extensively with sounds of his environment.

19.01 07 04 00 Manual Communication—A visual means of communication used by persons having severely impaired hearing. Its most generally accepted forms are finger spelling and the sign language. It is also used by educators in many schools as a means of instruction. The system is orthographic in nature in that distinct hand positions are identified with the 26 letters of the English alphabet. This system as an aid to teaching is more widely accepted because it follows normal patterns of straight language.

19.01 07 05 00 Electronic Reproduction—The use of tape or disc recordings to provide the auditorily or visually impaired individual with material to increase his general vocabulary and to provide supplemental academic information.

19.01 07 06 00 Typing for Communication—A device designed for use in connection with teaching language to pupils who are blind, partially sighted, brain injured, or physically handicapped. With physically handicapped persons, legibility is often difficult to obtain and typing provides both clarity and speed.

19.01 07 07 00 Speech Reading (Lip Reading)—A skill taught to hard of hearing and deaf persons. It involves learning to understand the lip and facial movements of individuals who are speaking by picking up cues to what is being said.

19.01 07 99 00 Other Special Communication Methods—Include here other organized subject matter and learning experiences emphasized in special communication methods which are not listed above in this subcategory. (Specify.)

19.01 99 00 00 **Other Communication Skills**—Include here other organized subject matter and learning experiences emphasized in communication skills which are not listed or classifiable above in this category. (Specify.)

19.02 00 00 00 INTERPERSONAL AND BEHAVIORAL COPING SKILLS

Curriculum approaches utilized to emphasize personal and social skills.

19.02 01 00 00 **Self-concept Development**—Learning situations designed to enhance the pupil's perception of himself and his environment. Required in these situations is a high degree of sensitivity to the interaction between the pupil's feelings of self and/or identity and his integration of these factors with the environment to which he is exposed. Adaptations of curriculum are oriented to assisting the child in realistically appraising his educational and behavioral status. A planned developmental program may be necessary to expose the pupil to learning experiences and tasks which afford him positive concepts of self.

19.02 02 00 00 **Self-concept Reeducation** — Learning situations designed to assist handicapped pupils in developing and nurturing feelings of competency. In many situations this may be accomplished by way of the school tasks; in other situations, longer periods of orientation or reorientation to school situations may be necessary.

19.02 03 00 00 **Social**—Learning situations designed to assist the pupil in maximum interaction with others and in responding to the social demands of the environment.

19.02 99 00 00 **Other Interpersonal and Behaviorial Coping Skills**—Include here other organized subject matter and learning experiences emphasized in interpersonal and behavioral skills not listed above in this category. (Specify.)

19.03 00 00 00 MOTORIC SKILLS

Instruction specifically designed to develop adequate motoric function which is impaired by restrictions in physical movement caused by crippling conditions, prolonged illness, visual defects, lack of auditory cues, serious cognitive defects, or behavioral disorders often resulting in limited sensory experience upon which school learning is based.

19.03 01 00 00 **Dexterity Skills** — Learning activities which involve practice, through use of selected materials, in reaching, lifting, holding, and moving objects on various developmental levels in a graded sequence of activities to develop muscle control and coordination.

19.03 01 01 00 Gross Motor Skills—Learning experiences designed to assist the pupil in working toward relatively independent physical movement, e.g., the use of wall rails for the crippled and guards on projections for the visually impaired, poorly balanced, or seizure prone; and practice in crawling, walking with support, and dancing (no matter how clumsy) for the severely motorically retarded. Included is instruction in game and sports rules for the hearing impaired, blind, crippled, and retarded, and correction of faulty gait patterns and elimination of unnecessary and interfering motions as well as structuring to promote rhythm and efficiency. Substitution for normal bodily characteristics that are absent due to a severe sensory loss (i.e., eye control for the blind, and quiet behavior for the deaf during auditory activities) are also emphasized.

19.03 01 02 00 Fine Motor Skills—Learning experiences designed to provide opportunity for pupils to use hands and fingers, hooks or artificial hands, in a variety of motivating

19 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS—Continued

activities including instruction to increase effectiveness by developing recognition of the need for guided practice and acceptance of an extended stage of awkwardness and/or retarded social use of the hands at given chronological ages. Emphasis is on materials designed for manipulation by pupils without visual experiences; enabling fantasy play for sensorily impaired and experientially deprived pupils; and a variety of creative art experiences for deaf, crippled, and mentally retarded pupils.

19.03 02 00 00 **Physical Management**—Learning experiences and instruction designed to assist pupils in developing physical skills for personal care and social functioning, whether performed independently in a usual or modified situation or with the assistance of another person.

19.03 02 01 00 Self-help Skills—Experiences and instruction organized to promote dressing, feeding, grooming and toileting skills for pupils who have limited or poorly controlled physical movement, or who do not have the usual visual cues, self-discipline, or mental maturity. The development of a workable self-concept is emphasized.

19.03 02 02 00 Use of Devices and Equipment (ordinary and special)—Instruction and practice concerning movements such as opening doors; turning dials efficiently and at appropriate times; propelling a wheel chair to standard chair or toilet seat; using crutches on various surfaces; locking and unlocking braces; mounting curbs and stairs; and riding a bicycle though blind. Also included are the care of hearing aids and the uses of prosthetic devices, talking books, Braille writers, and optic aids. Emphasized with predetermined structure is learning which is appropriate, functional, and sensible in the use of toys and school materials as well as in participation in special art and music instruction. The selection of materials with built-in skills to be learned is an important consideration.

19.03 02 03 00 Personal Safety—Learning situations which are provided when either the external environment or activity is to be modified to circumvent hazards and assure safety for self and others. Also emphasized are (1) the development of awareness of cues from intact senses to avert danger of collision, fire, health hazards, and personal attacks; (2) learning activities which help the pupil to perceive the physical situation of an anticipated destination and determine a means of communication and mobility to prevent potential injury or loss; and (3) the recognition of symptoms of fatigue, seizures, infections, reaction to drugs, insulin reaction or diabetic coma, hemorrhages, excessive fear or excitability, and limits of functional hearing or vision.

19.03 03 00 00 **Mobility Training**—The process of teaching orientation in space, the uses of body parts in movement, and travel skills to pupils having problems such as visual impairment, orthopedic conditions, mental retardation, emotional disturbances, and neurological impairments.

19.03 03 01 00 Orientation—Learning situations designed to teach a pupil to place his own body in relation to permanent and temporarily placed objects; judge distances and appreciate that the location of an object is independent of the path taken to reach it; distinguish between movement of self and of an external object; develop positional memory, and directional, temporal, and quantitative relationships; and unify information received from various senses.

19.03 03 02 00 Travel—Planned opportunities for pupils to apply mobility skills in school and community with use of intact senses. Gradual use of public transportation is emphasized for practice in reaching predetermined destinations, mounting steps, spending money, transferring from one vehicle to another, and behavior in a vehicle—particularly for the visually impaired, mentally retarded, crippled, and emotionally disturbed. The application of directional and spatial signals, the importance of detailed preparation prior to traveling to new localities, and the skills or procedures to be utilized in emergencies.

19.03 99 00 00 **Other Motoric Skills**—Include here other organized subject matter and learning experiences emphasized in motoric skills not listed above in this category. (Specify.)

19.04 00 00 00 PERCEPTUAL SKILLS

Learning experiences designed to relieve or correct visual, auditory, or tactual and kinesthetic perceptual problems and enable handicapped pupils to integrate multiple-sensory impressions.

19.04 01 00 00 **Auditory Training: Stimulation**—Activities designed to motivate pupils to make maximum use of hearing for learning, esthetic enjoyment and interpersonal communication.

19.04 02 00 00 **Auditory Training: Development**—Intensive and sequential learning activities planned and organized to help pupils who have serious sensory deficits develop maximum skills in hearing.

19.04 03 00 00 **Auditory Training: Correction**—Systematic intervention designed to help pupils alter auditory misperceptions and improve auditory discrimination and listening skill.

19.04 04 00 00 **Tactile and Kinesthetic Stimulation**—Planned activities which encourage pupils to make maximum use of tactile and kinesthetic experiences in general educational situations as well as in specific educational procedures such as reading Braille.

19.04 05 00 00 **Tactile and Kinesthetic Development**—Intensive and sequential activities which help pupils who have serious neuromuscular impairments progress toward the use of tactile and kinesthetic sensations for learning, including the development of an understanding of these sensory experiences as well as ability to relate them to visual and auditory sensations.

19.04 06 00 00 **Tactile and Kinesthetic Correction**—Systematic training or reeducation to enable pupils to attach correct and meaningful significance to skin and muscle sensations.

19.04 07 00 00 **Olfactory Stimulation**—Planned activities which encourage blind pupils to make maximum use of Olfaction in learning situa-

19 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS—Continued

tions in order to increase the pupil's knowledge and understanding of his environment.

19.04 08 00 00 **Olfactory Development**—Intensive sequential activities designed to help the blind pupil progress toward the development of an understanding of Olfaction as well as relating it to other senses.

19.04 09 00 00 **Visual Stimulation**—Activities which motivate pupils to make maximum use of vision for learning, esthetic enjoyment, and nonverbal communication.

19.04 10 00 00 **Visual Development**—Intensive and sequential learning activities designed to help pupils who have serious visual loss or perceptual disorders to maximize the use of their residual vision or develop appropriate responses to visual stimuli.

19.04 11 00 00 **Visual Correction**—Systematic intervention which provides reeducation for pupils who have formed inaccurate impressions as a result of visual limitations.

19.04 12 00 00 **Personal Spatial Relationships**—Intensive and sequential learning activities which are designed to enable handicapped pupils to observe and understand the boundaries of their own bodies and to develop appropriate relationships to objects and persons in the environment.

19.04 99 00 00 **Other Perceptual Skills**—Include here other organized subject matter and learning experiences emphasized in perceptual skills not listed above in this category. (Specify.)

19.05 00 00 00 **VOCATIONAL AND AVOCATIONAL SKILLS DEVELOPMENT**

Programs of instruction comprised of organized subject matter and related experiences designed to develop in the handicapped pupil the knowledge, skills, attitudes, and appreciations that relate to the world of work and the profitable use of leisure time.

19.05 01 00 00 **Vocational Information**—Planned classroom activities concerned with the place of work in our culture, the various resources for obtaining employment, the physical, social, and emotional skills required for retaining a job, overview of employment skill requisites, resources for improving one's work potential, and other preemployment information. Also included are planned observations of the world of work outside the school setting.

19.05 02 00 00 **Prevocational Work Experience**—Planned exposure to work on a paid or nonpaid basis for handicapped pupils under the supervision and control of school authorities. These experiences may be within the school environs, sheltered work settings, or in the competitive job market. School academic credit may or may not be given for these school-organized and supervised experiences.

19.05 03 00 00 **Specialized Vocational Preparation**—Experiences and subject matter organized to develop skills that will result *directly* in employment upon termination of the school enrollment. Examples of this are course work in small appliance repair, IBM keypunch operation, stenography, or offset printing skills. (Specify vocations.)

19.05 04 00 00 **Avocational Information**—The study of nonvocational activities and related problems. Frequently emphasized is information relating to constructive use of nonwork time including the study of recreational resources and facilities, values of outdoor living, table games, methods and procedures in home entertainment of guests, the place of church activities in family living, and the use of tour guides and other resource information relating to leisuretime utilization.

19.05 05 00 00 **Avocational Experience**—Experiences designed to convey specific recreational and leisuretime skills to the handicapped pupil or pupils in an applied manner. Included are such activities as dancing instruction, musical skill acquisition, art lessons, dramatic instruction, and therapeutic recreation. These experiences, organized and supervised by the school, may or may not include school academic credit.

19.05 99 00 00 **Other Vocational and Avocational Skills Development**—Include here other organized experiences, activities, and subject matter emphasized to enrich the life of the handicapped pupil or pupils that relate to present or future vocational and avocational competence, appreciation, or attitude development, which are not listed above in this category. (Specify.)

19.99 00 00 00 **OTHER DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS**

Include here other organized subject matter and learning experiences emphasized in curriculum exceptions for handicapped pupils which are not listed or classifiable in one of the above major categories. (Specify.)

COCURRICULAR ACTIVITIES

20.00 00 00 00

Cocurricular activities (experiences) are comprised of the group of school-sponsored activities, under the guidance or supervision of qualified adults, designed to provide opportunities for pupils to participate in such experiences on an individual basis, in small groups, or in large groups—at school events, public events, or a combination of these—for purposes such as motivation, enjoyment, and improvement of skills. In practice, participation usually is not required and credit usually is not given. When participation is required or credit is given the activity generally is considered to be a course.

Under this heading are the items of information which identify the various cocurricular activities. Each item of information is treated in one of the following ways: by cross-reference to the subject-matter area in which it has its origin; or, by description; or, by identification with an asterisk (*) referring to descriptive literature from the office of the organization sponsoring the activity. The classified items are *only* illustrative of the wide range of activities; and, the asterisk (*) is not necessarily identified with all of the listed activities to which it may appropriately apply. The cocurricular activities have been classified into five major categories: academic, athletic, music, school and/or public service, and social.

20 COCURRICULAR ACTIVITIES—Continued

20.01 00 00 00	**ACADEMIC COCURRICULAR ACTIVITIES** A combination of subject matter and experiences, usually not provided in a regular class, designed for pupils who wish to pursue satisfying individual/group interests and study in specific aspects of the subject matter provided in the regular class. Frequently emphasized are opportunities for pupils to enhance their personal understanding, initiative, knowledge and skills important to the selected interest, techniques of systematic planning and thinking, desirable citizenship, and cooperativeness which will enrich their regular classwork and personal lives.
20.01 01 00 00	**Art Club**—(For a description of various aspects of art see 02.00 00 00 00 ART.)
20.01 02 00 00	**Biology Club**—(For a description of various aspects of biology see 13.00 00 00 00 NATURAL SCIENCES, 13.02 00 00 00 *Biological Sciences* (including General Biology).)
20.01 03 00 00	***Boys Nation**—(American Legion, Indianapolis, Indiana)
20.01 04 00 00	**Debate Club**—(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.05 02 02 00 *Argumentation and Debate.*)
20.01 05 00 00	***Distributive Education Clubs of America**—(Distributive Education Clubs of America, Incorporated, Washington, D.C.)
20.01 06 00 00	**Dramatics Club**—(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.06 00 00 00 *Dramatic Arts.*)
20.01 07 00 00	**Family Living Club**—(For a description of subject matter see 08.00 00 00 00 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION, 08.01 05 00 00 *Family Life Education*; 09.00 00 00 00 HOME ECONOMICS, 09.01 06 00 00 *Family Relations*; and 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES, 15.13 04 02 00 *Family.*)
20.01 08 00 00	***4-H Club**—(National 4-H Club Foundation of America, Incorporated, Washing, D.C.)
20.01 09 00 00	**Foregin Language Club**—(May involve various languages—classical and/or modern) (For a description of subject matter of various foreign languages see 06.00 00 00 00 FOREIGN LANGUAGES.)
20.01 10 00 00	***Future Business Leaders of America**—(National Business Education Association (NEA), Washington, D.C.)
20.01 11 00 00	***Future Farmers of America**—(See 01.00 00 00 00 *Agriculture.* Future Farmers of America activities are uniquely (by Act of Congress, P.L. 740) an integral part of all instructional programs in agriculture. Time is frequently provided in regular classes to familiarize pupils with the objectives, functions, and activities of F.F.A. Additional items of information from chapters 3 and 4 of this handbook may be related to FFA to further describe the content and learning activities, e.g., category X 22 00., page 88; category X 23 00., pages 89–90; and category X 43 00., pages 101–102.) (U.S. Office of Education, Washington, D.C.)
20.01 12 00 00	***Future Homemakers of America**—(U.S. Office of Education, Washington, D.C.)
20.01 13 00 00	***Future Teachers of America (NEA)**—(National Education Association, Washington, D.C.)
20.01 14 00 00	***Girls Nation**—(American Legion Auxiliary, Indianapolis, Indiana)
20.01 15 00 00	***Industrial Arts Student Club**—(National Education Association, Washington, D.C.)
20.01 16 00 00	**International Relations Club**—(For a description of subject matter see 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES, 15.11 04 00 00 *International Relations.*)
20.01 17 00 00	**Journalism Club (including school newspaper and annual)**—(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.04 03 00 00 *Journalism.*)
20.01 18 00 00	***Junior Achievement, Incorporated**—(Junior Achievement, Incorporated, New York, N.Y.)
20.01 19 00 00	**Literary Club**—(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.03 00 00 00 *Literature.*)
20.01 20 00 00	**Mathematics Club**—(May involve various aspects of mathematics) (For a description of selected aspects of mathematics see 11.00 00 00 00 MATHEMATICS.)
20.01 21 00 00	**Music Club**—(May involve various aspects of music) (For a description of subject matter see 12.00 00 00 00 MUSIC.)
20.01 22 00 00	***National Honor Society (NEA)**—(National Education Association, Washington, D.C.)
20.01 23 00 00	***National Junior Honor Society (NEA)**—(National Education Association, Washington, D.C.)
20.01 24 00 00	***National Thespian Society**—(National Thespian Society, College Hill Station, Cincinnati, Ohio)
20.01 25 00 00	***Office Education Association**—(Office Education Association, P.O. Box 4287, Madison, Wisconsin)
20.01 26 00 00	**Photography Club**—(For a description of the subject matter see 02.00 00 00 00 ART, 02.02 07 00 00 *Photography and Related Media*; 10.00 00 00 00 INDUSTRIAL ARTS, 10.07 02 00 00 *Photography*; 13.00 00 00 00 NATURAL SCIENCES, 13.03 00 00 00 *Physical Sciences (including General Physical Science)*; and 17.00 00 00 00 TRADE AND INDUSTRIAL OCCUPATIONS, 17.09 00 00 00 *Commercial Photography Occupations.*)
20.01 27 00 00	***Quill and Scroll**—(Quill and Scroll Society, University of Iowa, Iowa City, Iowa)
20.01 28 00 00	**Science Club**—(May involve various aspects of the natural sciences) (For a description of subject matter see 13.00 00 00 00 NATURAL SCIENCES.)
20.01 29 00 00	***Science Fair, International**—(Science Service—Service Clubs of America, Washington, D.C.)
20.01 30 00 00	**Social Studies Club**—(May involve various aspects of social sciences/social studies) (For a description of subject matter see 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES.)

20 COCURRICULAR ACTIVITIES—Continued

20.01 31 00 00	**Speech Club**—(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.05 00 00 00 *Speech.*)
20.01 32 00 00	***Student Nurses Association**—(National Student Nurses Association, New York, N.Y.)
20.01 33 00 00	***Vocational Industrial Clubs of America**—(Vocational Industrial Clubs of America, Falls Church, Virginia)
20.01 34 00 00	***Voice of Democracy**—(Veterans of Foreign Wars, Kansas City, Missouri)
20.01 35 00 00	**Young Farmer Association**—(Sponsored by various State departments of education)
20.01 99 00 00	**Other Academic Cocurricular Activities**—Include here other academic cocurricular activities which are emphasized and are not listed above. (Specify.)

20.02 00 00 00 ATHLETIC AND SPORT COCURRICULAR ACTIVITIES

Subject matter and/or activities, usually not provided in regular classes, designed for pupils who wish to pursue satisfying individual/group interests growing out of various aspects of physical education. Frequently emphasized are opportunities for pupils to develop muscles, motor skills, and physical and mental fitness in competitive situations; knowledge, attitudes, and judgment essential to individual and group health and safety; enjoyment; and desirable citizenship. In practice, these activities usually are planned for enriching the regular classes and the lives of the pupils.

The code number and title of the subject-matter area 08.00 00 00 00 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION are not used in the cross-references in the athletic and sport cocurricular activities. Cross-references to items in the above subject-matter area cite only the code number and title of the appropriate item or category in which the item is classified.

20.02 01 00 00	**Aquatics**—(See the category 08.03 02 00 00 *Aquatics.*)
20.02 02 00 00	**Archery**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 03 00 00	**Badminton**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 04 00 00	**Baseball**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 05 00 00	**Basketball**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 06 00 00	**Bowling**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 07 00 00	**Cheerleading**—This activity is not described here because of the common understanding associated with it.
20.02 08 00 00	**Cross Country**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 09 00 00	**Field Hockey**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 10 00 00	**Football**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 11 00 00	**Girls' Athletic Association**—A voluntary association for girls designed to provide opportunities for them to participate in a variety of physical activities such as sports.
20.02 12 00 00	**Golf**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 13 00 00	**Gymnastics**—(See the category 08.03 08 00 00 *Stunts, Tumbling, and Gymnastics.*)
20.02 14 00 00	**Riflery**—Activity involving the use of selected firearms for shooting at specified target from various positions, e.g., prone, sitting, kneeling, and standing. Riflery may be competitive or noncompetitive, and may be organized on an individual or team basis.
20.02 15 00 00	**Snowskiing**—(See the category 08.03 07 00 00 *Outdoor Recreational Activities.*)
20.02 16 00 00	**Soccer**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 17 00 00	**Softball**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 18 00 00	**Tennis**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 19 00 00	**Track and Field**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 20 00 00	**Twirlers (Baton)**—This activity is not described here because of the common understanding associated with it.
20.02 21 00 00	**Volleyball**—(See the category 08.03 09 00 00 *Team Sports.*)
20.02 22 00 00	**Wrestling**—(See the category 08.03 06 00 00 *Individual and Dual Sports.*)
20.02 99 00 00	**Other Athletic and Sport Cocurricular Activities**—Include here other athletic and sport cocurricular activities which are emphasized and are not listed above. (Specify.)

20.03 00 00 00 MUSIC COCURRICULAR ACTIVITIES

Subject matter and/or activities, usually not provided in regular classes, designed for pupils who wish to pursue satisfying individual/group interests growing out of various aspects of music. Most music cocurricular activities are planned to provide opportunities for pupils to develop appreciations, enjoyment, knowledge, and skills in selected areas of music—in group situations or individually. In practice, these activities usually are organized for enriching the regular classwork and the lives of the pupils.

20.03 01 00 00	**Combo**—An abbreviation of "combination" denoting, usually, an instrumental group of four to eight players. A combo may improvise on standard tunes, as in Dixieland style; play "head arrangements" (i.e., those worked out and memorized in advance); or play from written arrangements.
20.03 02 00 00	**Concert Band** — (See 12.00 00 00 00 MUSIC, 12.05 01 00 00 *Band.*)
20.03 03 00 00	**Dance Band**—An instrumental group, usually comprising nine to seventeen pieces, including reeds (saxaphones and clarinets), brass (trumpets and trombones), and percussion (e.g., drums, bongoes, piano, and vibraharp). Occasionally, other instruments such as flute or horn are added. The dance band plays not only for dances, but also for other entertainment activities.
20.03 04 00 00	**Drum and Bugle Corps**—A military-type unit comprised of side drums, bass drums, other percussion instruments such as cymbals, and a variety of keyed bugles. Usually, the drum and bugle corps performs on the march, but may play from a fixed position.
20.03 05 00 00	**Marching Band**—(See 12.00 00 00 00 MUSIC, 12.05 01 00 00 *Band.*)
20.03 06 00 00	**Pep Band**—A unit, smaller than the marching band, which performs at various athletic events. Usually, it features a variety of antics designed to keep the participants and spectators at the event in a high state of excitement.

20 COCURRICULAR ACTIVITIES—Continued

20.03 07 00 00	**Choir**—(See 12.00 00 00 00 MUSIC, 12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)
20.03 08 00 00	**Chorus**—(See 12.00 00 00 00 MUSIC, 12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)
20.03 09 00 00	**Instrumental Ensemble**—(See 12.00 00 00 00 MUSIC, 12.05 03 00 00 *Small Instrumental Ensembles.*)
20.03 10 00 00	**Vocal Ensemble**—(See 12.00 00 00 00 MUSIC, 12.04 03 00 00 *Small Vocal Ensembles.*)
20.03 11 00 00	**Glee Club**—(See 12.00 00 00 00 MUSIC, 12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)
20.03 12 00 00	**Music Production**—The creation of musical performances—instrumental, vocal, or a combination of instrumental and vocal—having esthetic qualities. Musical productions frequently include performances as operettas, music festivals, band concerts, symphony concerts, and vocal concerts. Music productions usually are designed to provide opportunities for pupils to participate voluntarily for personal enjoyment and/or improvement of vocal or instrumental skills.
20.03 13 00 00	**Orchestra**—(See 12.00 00 00 00 MUSIC, 12.05 02 00 00 *Orchestra.*)
20.03 99 00 00	**Other Music Cocurricular Activities**—Include here other music cocurricular activities which are emphasized and are not listed above. (Specify.)
20.04 00 00 00	**SCHOOL AND/OR PUBLIC SERVICE COCURRICULAR ACTIVITIES** Activities organized for pupils who wish to pursue satisfying individual/group interests concerned with providing various types of assistance (service) to teachers, pupils, and others, including the community—individually, in small groups, or in large groups. Usually, these activities are designed to provide opportunities for pupils to: develop understanding and acceptance of responsibilities involved in serving others; develop desirable habits in citizenship and cooperation; gain knowledge and skills in selected interests; and enrich personal lives through the constructive use of time.
20.04 01 00 00	**Audiovisual Assistant**—A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills concerned with audiovisual materials and equipment. Audiovisual assistants aid teachers/pupils in or by: preparing various types of materials, e.g., splicing films, preparing transparencies, and making feltboard materials; procuring, setting up, operating, and returning and storing projection equipment; and cleaning and maintaining equipment and materials.
20.04 02 00 00	**Class Officer**—A service activity providing opportunities for groups of pupils, e.g., a class or a homeroom, to learn and practice the principles of democratic processes involved in interactions of individuals within a group, among groups within a school, and with the school staff. Usually, class officers are elected by the group to: preside over group-interest discussions; represent the class in meetings and cooperation with other school groups and the school staff; and provide leadership compatible with school and school system policies. Emphasized are parliamentary procedures, the roles of the minority and majority, techniques of group decision-making, fair play, and other related factors.
20.04 03 00 00	**Film Projectionist**—A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills concerned with audiovisual projection equipment. The film projectionist aids pupils/teachers by procuring, setting up, operating, and returning and storing various types of projectors.
20.04 04 00 00	**Laboratory Assistant** — Opportunities provided for pupils—knowledgeable in the course and related laboratory equipment, materials, and activities involved—to extend their interests, knowledge, and skills by assisting other pupils (under the supervision of the teacher) in procuring, setting up, and using laboratory materials and equipment involved in their study.
20.04 05 00 00	**Library Assistant**—A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills (under supervision of the librarian) by performing many library tasks such as charging books to borrowers, slipping and shelving returned books, repairing books, and typing book cards, envelopes, and overdue notices.
20.04 06 00 00	***National Junior Red Cross**—(American National Red Cross, The, Washington, D.C.)
20.04 07 00 00	***National Student Traffic Safety Program**—(National Commission on Safety Education (NEA), Washington, D.C.)
20.04 08 00 00	**Office Assistant**—A service activity designed for pupils to gain experience and develop and extend their interests, knowledge, and skills in office activities. Opportunities are provided for interested pupils to serve the staff, other pupils, and the community by assisting with routine duties in the principal's and other offices.
20.04 09 00 00	**Poster and Display Club**—(For a description of subject matter see 02.00 00 00 00 ART, the major category 02.02 00 00 00 *Art Studio* and 17.00 00 00 00 TRADE AND INDUSTRIAL OCCUPATIONS, 17.07 00 00 00 *Commercial Art Occupations.*)
20.04 10 00 00	**School Newspaper Photographer**—(For a description of the subject matter see 02.00 00 00 00 ART, 02.02 07 00 00 *Photography and Related Media;* 10.00 00 00 00 INDUSTRIAL ARTS, 10.07 02 00 00 *Photography*; and 17.00 00 00 00 TRADE AND INDUSTRIAL OCCUPATIONS, 17.07 00 00 00 *Commercial Photography Occupations.*)
20.04 11 00 00	**School Service Club**—(Includes guides for visitors, and ushers) A service activity designed to provide pupils an opportunity to develop citizenship responsibilities by serving their school—as guides to visitors, ushering at school events, orienting new pupils entering the school, maintaining bulletin boards, and related activities.
20.04 12 00 00	***Student Council, National Association of**—(National Association of Student Councils (NEA), Washington, D.C.)
20.04 13 00 00	***Student Patrol**—(American Automobile Association and Affiliated Auto Clubs, Washington, D.C.)
20.04 14 00 00	**Student Union and/or Student Activity Center**—Service activities designed to provide opportunities for pupils to develop knowledge and skills in serving other pupils

	who wish to use their nonclassroom time productively. Examples of these activities are the school newspaper, assisting in pupil-personnel functions, and community relations.
20.04 99 00 00	**Other School and/or Public Service Cocurricular Activities**—Include here other school and/or public service activities which are emphasized and are not listed above. (Specify.)
20.05 00 00 00	**SOCIAL COCURRICULAR ACTIVITIES** Activities organized for pupils who wish to pursue satisfying interests growing out of social experiences. These activities are planned to develop social knowledge, skills, understanding, citizenship, and acceptance and constructive use of responsibilities in group situations. In practice, these experiences are designed to provide enrichment in the constructive use of personal talent and time.
20.05 01 00 00	***Boy Scouts of America**—(Boy Scouts of America, National Council, New Brunswick, N.J.)
20.05 02 00 00	***Camp Fire Girls**—(Camp Fire Girls, Incorporated, New York, N.Y.)
20.05 03 00 00	**Creative Dance**—(For a description of subject matter see 08.00 00 00 00 HEALTH and SAFETY in DAILY LIVING, PHYSICAL EDUCATION, and RECREATION, the category 08.03 04 00 00 *Dance, Rhythms, and Dramatic Activities.*)
20.05 04 00 00	***(Cub Scouts (Boy Scouts of America)**—Boy Scouts of America, National Council, New Brunswick, N.J.)
20.05 05 00 00	**Folk Music Club**—A club designed to provide opportunities for pupils to develop social skills and extend their interests and improve their understanding, knowledge, and skills in folk music. Frequently included are activities such as exploring various types of folk music; discussing and exchanging ideas about it; listening to recordings; individual and group vocal and/or instrumental performance; and studying various cultures.
20.05 06 00 00	**Girls' Recreation Association**—An association planned for girls to provide opportunities for them to develop social skills and to extend individual group interests and improve their understanding, knowledge, and skills through participation in various forms of recreation. Frequently included are activities such as outdoor recreation, arts and crafts, hobbies, and performing arts.
20.05 07 00 00	***Girl Scouts of the U.S.A.**—(Girl Scouts of the U.S.A., New York, N.Y.)
20.05 08 00 00	***Hi-Y**—(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)
20.05 09 00 00	**Hobby Club**—A club designed to provide opportunities for pupils to develop social skills and to extend their interests and improve their understanding, knowledge, and skills in various hobbies. Frequently included are activities such as exploring various hobbies; discussing and exchanging information and ideas; and developing and displaying various hobby items.
20.05 10 00 00	***Junior Hi-Y**—(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)
20.05 11 00 00	***Junior Tri-Hi-Y**—(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)
20.05 12 00 00	**Stamp Club**—A club designed to provide opportunities for pupils to develop social skills and to extend their interests and improve their understanding, knowledge, and skills in the collection of postage stamps (philately). Frequently included are such activities as studying the science of philately; discussing and exchanging information and ideas; and developing and displaying collections of postage stamps.
20.05 13 00 00	***Tri-Hi-Y**—(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)
20.05 14 00 00	***Y.M.C.A.**—(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)
20.05 15 00 00	***Y-Teens**—(Young Women's Christian Associations of the U.S.A., National Board of, New York, N.Y.)
20.05 16 00 00	***Y.W.C.A.**—(Young Women's Christian Associations of the U.S.A., National Board of, New York, N.Y.)
20.05 99 00 00	**Other Social Cocurricular Activities**—Include here other social cocurricular activities emphasized which are not listed above. (Specify.)

SAFETY AND DRIVER EDUCATION
21.00 00 00 00

The subject matter and related activities in safety and driver education are organized for carrying on learning experiences concerned with developing in the learner the ability to respond appropriately and efficiently in the operation of a motor vehicle. and as a pedestrian in traffic. More specifically, instruction emphasizes attainment of the following objectives:

(1) appropriate knowledge and efficiency for living in the total traffic environment;

(2) fundamental driving skills and correct skill habits;

(3) desirable behavior pattern in traffic;

(4) an understanding of driver and pedestrian limitations, obligations, and responsibilities legally and socially; and

(5) knowledge about the motor vehicle and understanding of how society may achieve maximum efficiency in operating its motor vehicle transportation system.

Subject matter and activities in safety education are primarily concerned with enhancing personal characteristics and values involved in preventing accidents and saving lives. Instruction emphasizes, in addition to other factors, the following: (1) the development of appropriate attitudes towards safety, (2) knowledge concerning a wide range of safety factors, (3) habits and skills involved in safeguarding oneself and others, and (4) effective citizenship.

The following rationale was applied to the selection of items for placement in the Safety and Driver Education subject-matter area: (1) the content items

21 SAFETY AND DRIVER EDUCATION—Continued

were determined to be appropriate to the area; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various items were identifiable by titles which were considered as being most commonly used.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of safety and driver education as an integral part of the instructional program. As an example, the Student Patrol provides additional opportunities to pursue personal interests, apply various acquired skills in traffic safety, increase knowledge in selected aspects of safety education, and develop leadership qualities through safety patrol activities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Student Patrol is identified for reporting purposes under Cocurricular Activities as Item 20.04 13 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and figure 2 on page 13.

Included under this heading are the items of information which identify various aspects of subject matter and learning activities in driver and safety education.

21.01 00 0. 00 DRIVER EDUCATION

Learning experiences provided by the school for the purposes of helping pupils to become good traffic citizens and to operate motor vehicles safely and efficiently. The typical high school course consists of both classroom instruction and practice driving which provide learning experiences in a dual-control car.

21.01 01 00 00 **Alcohol, Drugs, other Harmful Substances and Driving**—Learning experiences and activities designed to help pupils understand the effects of harmful substances as they relate to the driving task.

21.01 02 00 00 **Characteristics of Drivers**—The study of the physical, mental, and emotional characteristics of the driver and their effects upon his driving.

21.01 03 00 00 **Development of Judgment**—Learning experiences designed for classroom and laboratory instruction dealing with the relationship of vision and perception, knowledge, physical laws and their application to formulating judgment, including the analysis of traffic situations and decisionmaking as they relate to drivers of other vehicles and to pedestrians.

21.01 04 00 00 **Driving Skills (Behind-the-wheel Driving)**—Laboratory experiences planned to help the pupil develop basic skills (and competencies) in starting and stopping, turning, executing special maneuvers, and driving under hazardous conditions involving expressways, parking, open-highway driving, and emergency situations.

21.01 05 00 00 **Simulation Driving Experience**—A combination of subject matter (including special films) and experiences involving the use of electromechanical devices for enhancing subsequent in-car instruction. Simulator instruction assists in developing basic skills related to performance and helps to develop perceptual and judgmental proficiencies.

21.01 06 00 00 **Engineering**—A study of the functions and responsibilities of the automotive engineer, highway engineer, and traffic engineer.

21.01 07 00 00 **Laws and Ordinances of Enforcement**—A study of local and State laws and ordinances, the Uniform Vehicle Code, and Model Traffic Ordinances and their relationship to law enforcement.

21.01 08 00 00 **Motor Vehicle, The**—Learning experiences including laboratory activities concerned with the mechanics of the vehicle, including the powerplant, gauges and indicators, and safety and control devices. Also emphasized are the economics of vehicle ownership, trip planning, and the possibility of vocational opportunities.

21.01 09 00 00 **Traffic Accidents**—A study of the literature, socioeconomic factors, human elements, roads, and vehicles as they relate to the traffic accident problem.

21.01 10 00 00 **Traffic Citizenship**—Learning experiences and activities concerned with the driver's responsibility to other drivers and highway users, to himself, to the community, and to the support of public officials.

21.01 99 00 00 **Other Driver Education**—Include here other organized subject matter and experiences emphasized in driver education which are not listed above. (Specify.)

21.02 00 00 00 SAFETY EDUCATION

A combination of subject matter and experiences directed toward the conservation of human and material resources. The learning environment provided is such that pupils may acquire knowledge and behavioral patterns conducive to efficient and safe living.

21.02 01 00 00 **Civil Defense**—Planned learning activities involving the preparation of pupils to meet both man-made and natural disasters. Natural disasters may include tornadoes, floods, blizzards, and hurricanes. Man-made disasters may include fire explosions, large-scale air or water pollutants, transportation accidents, construction disasters, and air-bombing attacks.

21.02 02 00 00 **Explosives**—The study of various kinds of explosives, including fireworks, flammable liquids and gases, blasting caps, dynamite, rockets, and various types of ammunition. Also emphasized are legal requirements and related safety factors. (Included as 08.02 01 00 00 *Explosives* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)

21.02 03 00 00 **Law, Liability, and Responsibility**—A study of the legal aspects of safety education including State and local statutes pertaining to the safe operation of schools, curriculum

21 SAFETY AND DRIVER EDUCATION—Continued

	requirements, responsibilities of State and local school administrators, liability suits and liability areas, legal terminology, legal defenses, insurance protection, and teacher and school liability.
21.02 04 00 00	**Personal Responsibility in Unsupervised Activities**—(For definition see 08.02 05 00 00 *Personal Responsibility in Unsupervised Activities* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION,)
21.02 05 00 00	**Safety in the Home**—(For definition see 08.02 06 00 00 *Safety in the Home* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)
21.02 06 00 00	**School Safety**—(For definition see 08.02 08 00 00 *School Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)
21.02 07 00 00	**Traffic Safety**—A study of the basic elements of the traffic problem, including the driver, the roadway, and the vehicle. The basic essentials for the safe and efficient operation of a motor vehicle are considered in the light of attitudes and habits to be developed, and the knowledge and skills to be learned. (Included as 08.02 09 00 00 *Traffic Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION) The traffic safety program is also considered as it relates to:
21.02 07 01 00	BICYCLE, MOTOR BIKE, OTHER—Learning activities and experiences concerned with safety factors in bicycling, including selecting a bicycle, keeping a bicycle in proper condition, practices of safe bicycle riding, and community cooperation for safe bicycling. The same learning activities and experiences are applicable to motorcycles, scooters, and motor-driven bicycles. (Included as 08.02 09 01 00 *Bicycle, Motor Bike, other* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)
21.02 07 02 00	PASSENGER—Learning activities and experiences concerned with safety factors when riding in a passenger car or taxi, a school bus, public conveyance, a train, a boat, and an airplane. (Included as 08.02 09 02 00 *Passenger* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)
21.02 07 03 00	PEDESTRIAN—Learning activities and experiences concerned with pedestrian practices in traffic, on rural roads and in cities, proper crossing procedures, and obeying traffic signs and signals. Included in instruction are situations where there are no sidewalks, wearing proper clothing, proper routes to and from school, and obeying student safety patrols. (Included as 08.02 09 03 00 *Pedestrian* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)
21.02 07 04 00	STUDENT PATROL—Learning activities and experiences concerned with the organization, supervision, structure, and functions of various school patrols including traffic, hall or school, school bus, playground, fire drill, and civil defense. (Included as 08.02 09 04 00 *Student Patrol* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION)
21.02 07 99 00	OTHER TRAFFIC SAFETY—Include here other organized subject matter and experiences emphasized in traffic safety which are not listed above. (Specify.)
21.02 08 00 00	**Vocational and Occupational Safety**—(For definition see 08.02 10 00 00 *Vocational and Occupational Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)
21.02 99 00 00	**Other Safety Education**—Include here other organized subject matter and experiences emphasized in safety education which are not listed above. (Specify.)

JUNIOR ROTC
22.00 00 00 00

Junior ROTC is comprised of a body of subject matter, or combinations of courses and practical experience, organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected branches of the military service. In the instructional process various aspects of subject matter frequently are drawn from other subject-matter areas.

Instruction is concerned with developing (1) good citizenship, patriotism, self-reliance, leadership, and responsiveness to constituted authority; (2) knowledge of basic military skills and appreciation of the role of the military services in military defense; and (3) informed citizens, strength of character, and understanding of the responsibility of citizens in a democratic society.

The following rationale was applied to the selection of the items for placement in the Junior ROTC area: (1) the various items selected and classified were determined as including the aspects of Junior ROTC most commonly taught; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified were identified by titles that are considered to be in current use in Junior ROTC.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

The following items of information identify substantive content, specialized experiences, and career objectives emphasized in Junior ROTC.

22.01 00 00 00	**ARMY JUNIOR ROTC** Organized subject matter and learning activities which are concerned with the development in each cadet (1) attributes

22 JUNIOR ROTC—Continued

of good citizenship and patriotism, (2) self-reliance, leadership, responsiveness to constituted authority, and (3) a knowledge of the basic military skills and appreciation of the role of the U.S. Army in national defense.

22.01 01 00 00 **Introduction to ROTC/NDCC and Military Organization**—The study of the purpose and objectives of the ROTC/NDCC program, including benefits that students may receive by participation in ROTC. Included in instruction are the history and background of ROTC/NDCC, with emphasis on the local ROTC unit and its history, organization, traditions, awards, and decorations. Attention is given to orientation concerning the cadet uniform and insignia, including proper wear, care, and maintenance of the uniform. The basic theory of military organization with emphasis on unity of command and chain of command, its structure, flexibility, and the concept of tailored forces, is also emphasized.

22.01 02 00 00 **Leadership**—Planned learning activities designed to provide for leadership training, drill experience, and the development of certain essential characteristics of leadership such as initiative and self-confidence through progressive training in the school of the soldier and exercise of command. Subject matter and experiences are planned to develop in the student qualities of courtesy and discipline, habits of correct posture, precision in execution of drill movements, and response to a leader's orders; and provide practical experience in the duties and conduct of officers and noncommissioned officers in the exercise of command. Consideration is given to the similarity between leadership in military and civilian life and the necessity for responsiveness to constituted authority in both environments.

22.01 02 01 00 Courtesies, Customs, and Rules of Conduct—Subject matter and experiences concerned with military courtesy, customs, and rules of conduct; salutes, terms of address and titles, and insignia of grade; honors to the National Anthem and to the flag, including display and care of the flag; personal honor and integrity; courtesies to individuals; and origins of customs. General indoctrination in traditions of the Army and pride in the uniform, military justice and the unit commander, and the Code of Conduct are emphasized.

22.01 02 02 00 Leadership, Drill, and Exercise of Command—Learning experiences designed for the soldier with and without arms. Drill for foot troops including squad, platoon, and company drill is emphasized, as are wearing, caring for, and maintaining the uniform. Duties and responsibilities of leaders and the individual soldier during ceremonies, parades, reviews, escorts, inspections, and regular drill periods and the development of command voice are studied and practiced. Preparation for and conduct of formal inspections in ranks and barracks are provided, as appropriate, with and without personal field equipment. Particular emphasis is placed on proper methods of instruction and supervision of physical training, e.g., organized athletics such as softball, volleyball, swimming, tennis, and such other sports as are permitted by local conditions and available time.

22.01 02 03 00 Psychology of Leadership—An introductory course in leadership which emphasizes principles of leadership, leadership traits and techniques, response to leadership, human behavior, and adjustment to regimentation.

22.01 02 04 00 Principles of Leadership—Subject matter concerned with responsibilities and basic qualities of a leader, objectives of leadership, leadership principles and techniques, functions of the leader, and special problems of military leadership.

22.01 02 99 00 Other Leadership—Include here other organized subject matter and experiences emphasized in leadership which are not listed above. (Specify.)

22.01 03 00 00 **Hygiene and First Aid**—The study of elementary personal hygiene, general hygienic rules, body care and cleanliness, necessity of routine habits in daily bodily functions, care of the feet, and regular physical examinations. Personal hygiene and individual health rules in the field, insect control and prevention of insect bites, cleansing of eating utensils, improvised washing and bathing facilities, waste disposal, march hygiene and camp sites, and field water supplies are emphasized. Instruction includes responsibilities of leaders in matters of health control, dressing and protection of wounds, prevention of infection, control of hemorrhage, prevention of shock, control of pain, use of first-aid kit and packet, applicatory exercises in bandaging, artificial respiration, and first aid for common emergencies. Opportunities are provided for study and practice in first aid for poisons, snake bites, insect bites, heat exhaustion and heat stroke, and manually carrying the sick and wounded.

22.01 04 00 00 **Weapons**—Instruction which provides for detailed study of latest standard individual and crew-served weapons.

22.01 04 01 00 Individual Weapons — Instruction which provides for detailed study of the latest standard individual weapons. Emphasis is given to rifle 7.62mm, M14 or U.S. rifle caliber .30 M1, including descriptions, characteristics, disassembly and assembly, operations, functioning, spare parts, accessories, ammunition, and care and cleaning. Familiarization with caliber .45 pistol, rifle 5.56mm M16, and hand and rifle grenades, machinegun 7.62mm, M60 and machinegun caliber .30 M1919A6 is provided.

22.01 04 02 00 Crew-served Weapons—Subject matter and experiences concerned with light crew-served weapons, including characteristics, general data, disassembly, assembly, and functioning. Instruction provides for familiarization with the 40mm grenade launcher M79, 3.5-inch rocket launcher, 66mm HEAT Rocket, M72, and/or other latest standard crew-served weapons. Classes on standard crew-served weapons, including mortars and antitank weapons with emphasis on the 81mm mortar and the 90mm and 106mm recoilless rifles, and characteristics, capabilities, and types of ammunition are conducted.

22.01 04 99 00 OTHER WEAPONS—Include here other organized subject matter and experiences emphasized in weapons which are not listed above. (Specify.)

22.01 05 00 00 **Marksmanship**—Subject matter and experiences concerned with principles of marksmanship, demonstrations, student participation in sighting and aiming, positions, trigger squeeze, sling adjustment, range procedure, and safety precautions. Range practice with the .22 caliber rifle and matches and competition with the .22 caliber rifle are conducted as applicable.

22.01 06 00 00 **American Military History** — Subject matter designed to provide a brief resume of important U.S. Army campaigns and battles, achievements and traditions of the U.S. Army, biographical sketches of prominent Army leaders, past and present, examples of personal heroism and unit gallantry in the U.S. Army, and famous mottoes, slogans, and colorful traditions of units. Contributions of the Army to the Nation such as defense of the country, western exploration, and scientific and medical contributions are emphasized, including the "citizen soldier" tradition, and the role of the soldier in a democracy.

22.01 07 00 00 **Small Unit Tactics: Infantry**—An organization of subject matter designed to teach the students basic tactics of small infantry units, to instruct in individual training of the infantry soldier, and to impart the principles and fundamentals of small unit tactics.

22.01 07 01 00 INDIVIDUAL—Subject matter and experiences concerned with the tactical training of the individual soldier. Included for study are organization of the rifle platoon with emphasis on the rifle squad; scouting and patrolling, day and night; individual protection of the soldier; elementary camouflage; and techniques of fire.

22.01 07 02 00 SQUAD—Subject matter and experiences concerned with squad tactics. Instruction emphasizes organization of the rifle platoon, particularly the rifle squad; scouting and patrolling, day and night; elementary camouflage; squad formations; techniques of fire of the squad; and the rifle squad in the attack and defense.

22.01 07 03 00 PLATOON—The study of the organization of the infantry company with emphasis on the rifle platoon, the rifle platoon in the attack and defense, platoon formations, and battle drill.

22.01 07 04 00 COMPANY—The study of the company in the attack and defense. Tactical control measures and principles of defense, estimate of the situation, operations orders, and troop-leading procedures are included in instruction.

22.01 07 05 00 BATTALION—The study of the organization of the infantry battalion with emphasis on the rifle company. The combined arms team, tactical control measures and principles of defense, estimate of the situation, operations orders, and troop-leading procedures are all emphasized in instruction.

22.01 07 99 00 OTHER SMALL UNIT TACTICS: INFANTRY—Include here other organized subject matter and experiences emphasized in small unit tactics, infantry, which are not listed above. (Specify.)

22.01 08 00 00 **Map and Terrain Analysis**—An introduction to map and terrain analysis. Instruction is concerned with marginal information, conventional signs and military symbols, grid coordinates, location and direction, azimuths, use of compass, scale and distance, and elevation and relief; location by intersection and resection; preparation of overlays; and introduction to aerial photograph reading.

22.01 09 00 00 **Military Teaching Methods**—Subject matter designed to provide an introduction to military teaching methods, including the stages of instruction and the importance of each. Techniques used in planning and instruction, speech techniques, the construction and use of lesson plans and training aids, and the construction and use of tests to evaluate training are emphasized.

22.01 10 00 00 **New Developments**—Organized subject matter and experiences concerned with current unclassified developments in organization, tactics, weapons, techniques, and materiel of the Army.

22.01 11 00 00 **Military Service: Opportunities, Obligations, and Benefits**—The study and analysis of the Senior ROTC Program, including scholarship opportunities; the National Guard, the Army Reserve, and the Regular Army; and opportunity for an officer or enlisted career in the Regular Army.

22.01 12 00 00 **Counterinsurgency**—Subject matter organized to provide an introduction to counterinsurgency, including a brief analysis of the nature of insurgency, its environment, its prerequisites, the threat it constitutes, and motivation of the individual insurgent. Methods of combating insurgency and the Army's role in counterinsurgency are also studied.

22.01 13 00 00 **Branches of the Army**—Study concerned with the general mission and role of the various branches of the Army. The combat arms team, and the supply, service, and maintenance contribution of the technical and administrative services in furnishing combat service support to the field Army are emphasized.

22.01 14 00 00 **Communications**—A combination of subject matter and activities concerned with the methods and techniques of communications, including messenger, wire, radio, visual, and sound; basic wire communication and equipment; basic radio communication and equipment; and radio procedure. The importance of communications in combat operations is stressed in instruction.

22.01 15 00 00 **Methods of Instruction**—Subject matter designed to provide a thorough review of military teaching methods. Actual instruction is given by cadets with emphasis on the U.S. Army and its role in national security.

22.01 99 00 00 **Other Army Junior ROTC**—Include here other organized subject matter and experiences emphasized in Army Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)

22.02 00 00 00 **NAVY JUNIOR ROTC**

One of the military service branches directed by Section 2031, Title 10, United States Code, to establish JROTC Units at public and private secondary institutions. The three-year program (sophomore, junior, and senior high school years) follows NAVPERS curriculums with the following objectives: to develop informed citizens, strengthen character, promote an understanding of the military responsibilities of citizens in a democratic society, and develop an appreciation of the U.S. Navy and the role of sea power in the national defense.

22.02 01 00 00 **Naval Science I**—Subject matter and experiences provided in grade 10 with emphasis on topics such as Naval Orientation, Naval History, Customs, and Traditions, Importance of Sea Power, and Our Modern Navy, including United States History from a Navy viewpoint. Also included is an introduction to Drills, Commands, and Ceremonies.

22.02 01 01 00 DRILLS, COMMANDS, AND CEREMONIES—The study of and practical training in the nomenclature, positions, movements, and other aspects of military drill on the squad, platoon, and company levels. Performance may be with or without arms (rifles).

22.02 01 02 00 ORIENTATION AND SEA POWER—The study of the history, customs, courtesies, and organization of the U.S. Navy. Instruction is planned to impress upon the cadet the importance of sea power and the need for a strong modern Navy.

22.02 01 99 00 OTHER NAVAL SCIENCE I TOPICS—Include here other subject matter and experiences emphasized in Naval Science I which are not listed above. (Specify.)

22.02 02 00 00 **Naval Science II**—Subject matter and experiences provided in grade 11 with emphasis on topics such as science (oceanography and meteorology), navigation (e.g., aids, charts, rules of the nautical road, dead reckoning, and piloting), and Seamanship (marlinspike, deck, and boat). Also included are first aid and more advanced participation in Drills, Commands, and Ceremonies. The fundamental skills and knowledge necessary to a man aboard a navy ship comprise an important part of instruction.

22.02 02 01 00 ADVENTURES IN SCIENCE—The study of the basic facts, concepts, and principles of the branches of science most useful to future naval officers and enlisted personnel in the performance of their duties aboard ship.

22.02 02 01 01 *Meteorology*—(For definition see Earth-Space Sciences, 13.04 03 00 00 *Meteorology*, under NATURAL SCIENCES.)

22.02 02 01 02 *Oceanography*—(For definition see Earth-Space Sciences, 13.04 04 00 00 *Oceanography*, under NATURAL SCIENCES.)

22.02 02 01 99 *Other Adventures in Science Topics*—Include here other topics emphasized in the adventures in science which are not listed above. (Specify.)

22.02 02 02 00 DRILLS, COMMANDS, AND CEREMONIES—(For definition see 22.02 01 01 00 *Drills, Commands, and Ceremonies* under *Naval Science I.*)

22.02 02 03 00 FIRST AID—(For definition see 08.01 06 00 00 *First Aid* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

22.02 02 04 00 NAVIGATION I—The study of the art/science that enables the mariner to (1) determine his ship's position, and (2) guide her safely from one point to another. Included in instruction are the basic fundamentals of piloting, dead reckoning, electronic navigation, rules of the road, and the use of navigational instruments and aids.

22.02 02 05 00 SEAMANSHIP—The study of the fundamentals of the art of handling, working, and navigating naval ships and small craft. Included in instruction are the basic fundamentals of boat, deck, and marlinspike seamanship and small craft safety.

22.02 02 99 00 OTHER NAVAL SCIENCE II TOPICS—Include here other subject matter and experiences emphasized in Naval Science II which are not listed above. (Specify.)

22.02 03 00 00 **Naval Science III**—Subject matter and experiences provided in grade 12 with emphasis on topics such as science (astronomy), navigation (relative motion, bearings, plotting, vector diagrams, and celestial navigation), and electronics (communications, radar, sonar). Also included are leadership and more advanced participation in Drills, Commands, and Ceremonies. An important aspect of instruction is the development of an understanding of the principles of the more technical functions and equipment aboard naval vessels.

22.02 03 01 00 ADVENTURES IN SCIENCE—(For definition see 22.02 02 01 00 *Adventures in Science* under *Naval Science II.*)

22.02 03 01 01 *Astronomy*—(For definition see Earth-Space Sciences, 13.04 01 00 00 *Astronomy*, under NATURAL SCIENCES.)

22.02 03 01 99 *Other Adventures in Science Topics*—Include here other topics emphasized in the adventures in science which are not listed above. (Specify.)

22.02 03 02 00 DRILLS, COMMANDS, AND CEREMONIES—(For definition see 22.02 01 01 00 *Drills, Commands, and Ceremonies* under *Naval Science I.*)

22.02 03 03 00 ELECTRONICS—The study of the basic concepts in the field of electronics. Emphasis is placed primarily on the theory of operation of typical electronic devices involved in communications, radar, and sonar.

22.02 03 03 01 *Communications*—Specialized learning experiences in elementary interior and exterior naval communications to develop in the cadet an appreciation of the importance of reliability, security, speed, and the methods employed to achieve them.

22.02 03 03 02 *Radar*—Classroom study of the basic principles for using the electronic device of RADAR (radio detection and ranging) to detect the presence, range, bearing, elevation, and speed of airplanes, ships, and land masses in darkness, fog, or storm.

22.02 03 03 03 *Sonar*—Classroom study of the basic principles for using the electronic device of SONAR (sound navigation and ranging) as underwater sound equipment for submarine detection and navigation.

22.02 03 03 99 *Other Electronics*—Include here other organized subject matter and experiences emphasized in electronics which are not listed above. (Specify.)

22 JUNIOR ROTC—Continued

22.02 03 04 00	JUDO—Organized subject matter and experiences concerned with the basic fundamentals of a refined form of jujitsu presented as part of the physical fitness emphasis in the Navy Junior ROTC program.
22.02 03 05 00	LEADERSHIP—The study and development of understanding concerning the basic essentials of an effective naval leader. Included in instruction are such areas as moral responsibility, loyalty, devotion to duty, self-confidence, initiative and ingenuity, courage, ability to organize and make decisions, and personal example.
22.02 03 06 00	NAVIGATION II—An extension of the study of the art or science that enables the mariner to (1) determine his ship's position, and (2) guide her safely from one point to another as described in *Navigation I*. Included for additional study are the basic fundamentals of relative motion, bearings and plotting, vector diagram of speed triangle, intercept solutions, celestial navigation, and other related factors.
22.02 03 07 00	SURVIVAL—Organized subject matter and experience concerned with the basic fundamentals necessary to the preservation of life in the face of disaster. Emphasis is on survival in the water and the use and care of equipment normally available.
22.02 03 99 00	OTHER NAVAL SCIENCE III TOPICS—Include here other subject matter and experiences emphasized in Naval Science III which are not listed above. (Specify.)
22.02 99 00 00	**Other Navy Junior ROTC—**Include here other organized subject matter and experiences emphasized in Navy Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)
22.03 00 0. 00	**AIR FORCE JUNIOR ROTC** A combination of subject matter and experiences involving principles, skills, knowledge, and appreciation concerned with the role of the United States Air Force in national defense. Instruction also emphasizes the development of citizenship, character, leadership, self-reliance, and general knowledge.
22.03 01 00 00	**Introduction to Aerospace Education—**Subject matter and experiences concerned with initial exploration of aseospace factors, including an overview of the development and impact of aerospace, a familiarization with aircraft and spacecraft, an examination of the environment in which such craft operate, and an orientation to the work of the United States Air Force and the customs and courtesies used by its military members.
22.03 01 01 00	THE COMING OF THE AEROSPACE AGE—The study of antecedents and early beginnings of aviation and the advent of space exploration; a look at the pioneers of aerospace and their contributions; and the developments that have led to the present state of aerospace technology.
22.03 01 02 00	AEROSPACE AND THE AMERICAN PEOPLE—The study of the impact of the development of aircraft and spacecraft upon the people of the United States and other nations. A resume of the changes that have resulted in the American society and economy, including effects upon education, geography, science, communication, commerce, security, and everyday life, is included in instruction.
22.03 01 03 00	AIRCRAFT OF TODAY—Subject matter and experiences applied to modern aircraft, e.g., component parts, differences in design and purpose, and basic terms and ideas related to flight and propulsion; the general capabilities of current military and commercial models; and familiarization with military and nonmilitary aircraft to the extent of being able to identify or describe each.
22.03 01 04 00	SPACE AND THE UNIVERSE—The study of space geography and related terminology and concepts. Recent knowledge about neighbors of the earth and ideas for future space travel are emphasized in instruction.
22.03 01 05 00	SPACECRAFT AND LAUNCH VEHICLES—The study of terminology and general principles of rocketry and the rockets and missiles now in use, including current and recent space flights and projected ones.
22.03 01 06 00	WEATHER—The study of atmospheric components and phenomena as applied to meteorology and aeronautics, including the nature of forecasting and its importance to aviation and the Air Force, and the evolution of weather technology.
22.03 01 07 00	THE AIR FORCE COMMUNITY—The study of the air force base as (1) a military community, including its geography, facilities, and ways of functioning; and (2) the worldwide complex of air bases and the meaning for American society.
22.03 01 08 00	AIR FORCE TRADITIONS, CUSTOMS, AND FLIGHT DRILL—Subject matter and experiences designed to help the student become acquaninted with the existence and development of Air Force traditions and customs, including United States flag etiquette, the hand salute, respect for authority, principles of honor and integrity, and allegiance to country. Emphasized are appreciation of the need for discipline in military group activities; learning to wear the uniform properly and proudly; and learning individual positions and facing movements, the rank and file maneuvers required to move a formation of flight size, and how to give commands for such actions. Opportunity for demonstration of attained proficiency is provided in instruction.
22.03 01 99 00	OTHER INTRODUCTION TO AEROSPACE EDUCATION—Include here other organized subject matter and experiences emphasized in the introduction to aerospace education which are not listed above. (Specify.)
22.03 02 00 00	**Elements of Aerospace Education—**Subject matter and experiences designed for the study of selected areas of aeronautics, e.g., examination of the component factors of aerospace power, and the development of individual and group skills sufficient for appropriate participation in Air Force ceremonies.
22.03 02 01 00	THEORY OF AIRCRAFT FLIGHT—Subject matter and experiences concerned with the study of aerodynamic forces as related to atmospheric properties, in-

cluding an examination of the structure of the aircraft, its central mechanisms, and its characteristics in flight. The student is introduced to aircraft instruments, preflight, flight, and postflight check procedures.

22.03 02 02 00 **Propulsion Systems for Aircraft**—The study of the factors influencing atmospheric flight through propulsive means. Fuels, machines, component sections of reciprocating engines, jet engines, and rockets are studied. Physical and chemical properties and indices of relative efficiencies are explored. Other functional systems of an aircraft are examined as they relate to aircraft propulsion.

22.03 02 03 00 **Air Navigation**—Subject matter and experiences concerned with exploring the use of maps, charts, and various forms of projections which are basic navigator tools. Pilotage, dead reckoning, and radio navigation are introduced in instruction and practical navigation problems are explored and solved. The role of the Federal Government in providing navigational and communication aids is examined.

22.03 02 04 00 **Aerospace Industry and Research**—The study and analysis of the scope and breadth of aerospace industry: personnel, functions, financial considerations, products, plant locations, and general industrial trends. Emphasis is on the recognition of aerospace power as a combined resultant of all contributing forces, i.e., military air, civilian air, and the supporting facilities, personnel, industries, and educational systems. In the review of research activities and potential, an examination is made of new and projected aircraft developments.

22.03 02 05 00 **Civilian Aviation and Facilities**—An examination of civil air factors, including facilities and their planning, development, and utilization. The need for national coordination and support of Federal agencies is also included. The student examines air carrier organizations with particular attention to scheduled and nonscheduled airlines. Additionally, air-taxis, charter operations, and agricultural, business, and recreational flying are reviewed. Problems of scheduling, safety, sales, tariffs, engine overhauls, franchises, personnel, duties, and long-range programs are covered.

22.03 02 06 00 **Military Aerospace**—Subject matter and experiences designed to help the student become acquainted with the tasks of the Air Force and the capability of Air Force personnel and units in the use or support of strategic, tactical, and defensive weapons systems. In addition to establishing the specific aerospace roles of the Air Force, a review of Army and Navy air is also included in instruction.

22.03 02 07 00 **Techniques of Instruction and Ceremonial Drill**—Subject matter and experiences concerned with helping students become familiar with the concepts of how to instruct others. Opportunities are provided to apply these concepts in teaching drill skills and the knowledge of ceremonies to beginners in the AFJROTC program. Emphasis is on increasing knowledge and abilities to the point that one can competently participate in squadron-size and larger mass formations. As in the first year, application of attained proficiency is stressed.

22.03 02 99 00 **Other Elements of Aerospace Education**—Include here other subject matter and experiences emphasized in elements of aerospace education which are not listed above. (Specify.)

22.03 03 00 00 **Aerospaceage Leadership**—Subject matter which is designed to provide explanation of space technology and space programs; a review of leadership opportunities in space, national defense, and aerospace preparation; and an analysis of factors and techniques involved in leadership situations.

22.03 03 01 00 **Space Exploration: Manned and Unmanned Flight**—A study of subject matter concerned with the capabilities and restrictions that characterize man in relationship to the total problem of conquest of space. The state of development of the U.S. space programs is analyzed in order to determine the degree of progress that has been made and implications for the future. In addition, a careful review is made of the area of peaceful scientific exploration and probes into space.

22.03 03 02 00 **Space Technology/Propulsion: Guidance and Control of Space Vehicles**—A semitechnical study of two basic essentials of space technology: (1) an examination of the generally-used propulsion systems as well as a futuristic overview of more sophisticated systems; and (2) the orderly progression from the simple to the more complex systems of guidance and control, with attention to the facilities and organizations involved.

22.03 03 03 00 **International Space Programs**—Study involving summary and discussion of the achievements of other nations in the application of current and future space programs, including the implications for international law. Plans for future U.S. programs are analyzed.

22.03 03 04 00 **Human Factors of Aviation and Space**—Subject matter concerned with the detailed study of the physiological aspects of aviation and flight. The training requirements, selection procedures, and projected needs of the astronaut program are included. Leadership in the aerospace age and the identification of the role and techniques of the leader are critically reviewed, including the identification of future needs for national and international aerospace leadership.

22.03 03 05 00 **The Defense of the United States**—Study involving the examination of national defense structure, including the executive agencies, the Department of Defense, the USAF, the U.S. Navy, the U.S. Army, the U.S. Marines, and the U.S. Coast Guard. Particular attention is devoted to the national aerospace program and the interrelated responsibilities of the agencies mentioned above. Civil defense, its need and functions, is studied with attention given to civilian defense organization at the local level.

22.03 03 06 00 Aerospace Opportunities for the Individual—Subject matter concerned with an introduction to the spectrum of vocational and educational opportunities in aerospace work. Civilian and government careers in aerospace are reviewed; the nature of military obligations is examined in relationship to commissioning and enlistment opportunities; and, in particular, the educational and professional challenges of college-level Air Force ROTC are discussed.

22.03 03 07 00 Aerospace Leadership Application—Subject matter concerned with ledership techniques that are useful in dealing with fellow students, particularly in AFJ-ROTC. Problem solving and the analysis of skills valuable in leading others are introduced. Knowledge is applied and experience is provided through occupancy of leadership positions in the cadet organization. The opportunity to improve further the ability to instruct other students is continued through this third year.

22.03 03 99 00 Other Aerospaceage Leadership—Include here other subject matter and experiences emphasized in aerospaceage leadership which are not listed above. (Specify.)

22.03 04 00 00 **National Security**—The examination and study of the elements of national security, the military organization, and the military in action.

22.03 04 01 00 Elements of National Security, Part I—Subject matter designed for a study of the nature and purpose of war, the functions and employment of the United States military forces, and the current prospects and trends in the search for world peace.

22.03 04 02 00 Elements of National Security, Part II—Subject matter designed for extending the study of the nature and purpose of war, the functions and employment of the United States military forces, and the current prospects and trends in the search for world peace.

22.03 04 03 00 The Military Organizations In Action—A combination of subject matter and skills development designed to provide practical leadership experiences in basic military and officer-type activities.

22.03 04 99 00 Other National Security—Include here other subject matter and experiences emphasized in national security which are not listed above. (Specify.)

22.03 99 00 00 **Other Air Force Junior ROTC**—Include here other subject matter and experiences emphasized in Air Force Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)

22.04 00 00 00 **MARINE CORPS JUNIOR ROTC**

A combination of subject matter and experiences involving principles, skills, knowledge, and appreciation concerned with the role of the United States Marine Corps in national defense. Instruction also includes the principles and processes of military training, and emphasizes the development of citizenship, character, leadership, self-reliance, and general knowledge.

22.04 01 00 00 **Military Training I**—Basic subject matter and learning activities which are concerned with the principles and processes involved in military training. In practice, activities include classroom instruction and application in and out of school. Aspects of basic military training are organized under a variety of descriptive titles such as History and Traditions of the Marine Corps, Military Organization, and Weapons and Marksmanship

22.04 01 01 00 Introduction to Marine Corps Junior Reserve Officer Training Corps—Subject matter concerned with the purpose and objectives of Marine Corps Junior Reserve Officer Training Corps, its benefits and potentialities, and requirements for advancement. Attention is also given to local awards and decorations, organization of the local unit, wearing of uniform, and cadet insignia of rank.

22.04 01 02 00 History and Traditions of the Marine Corps—Subject matter devoted to the basic history and traditions of the Marine Corps from 1775 to the psesent time.

22.04 01 03 00 Military Organization—The study of the underlying theory of Marine Corps organization in simplified form, with emphasis on the following: Necessity for one leader for each unit or subdivision; span of control and the chain of command; assignment of specific duties and responsibilities to all personnel; integration of smaller units into larger teams; and general design of military organization to fit missions to be performed.

22.04 01 04 00 Courtesies, Customs, and Rules of Conduct—Subject matter that is concerned with military courtesy, customs, and rules of conduct. Emphasized in instruction are a brief introduction to the punitive address and titles, insignia of grade, and honors to the National Anthem and to the flag; display and care of the flag; personal honor and integrity; courtesies to individuals; and origin of customs. General indoctrination in pride of the Marine Corps uniform and the traditions of the Marine Corps are also included.

22.04 01 05 00 Hygiene—Subject matter which is concerned with elementary personal hygiene, general rules, care of the body, cleanliness, necessity of routine habits in the daily bodily functions, regular physical examinations, and care of the feet. Included in instruction are personal hygiene and individual health rules in the field, insect control and prevention of insect bites, cleansing of eating utensils, improvised washing and bathing facilities, waste disposal, march hygiene and campsites, and field water supplies. Responsibility of the individual leader in matters of health control is emphasized.

22.04 01 06 00 First Aid—A combination of subject matter and experiences concerned with dressing and protecting wounds, prevention of infection, control of pain, use of first-aid kit and packet, applicatory exercises in bandaging, artificial respiration, first aid for poisons, snake bites, insect bites, heat exhaustion and heat stroke, and manually carrying the sick and wounded. (See also 08.01 06 00 00

First Aid under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

22.04 01 07 00 Leadership, Drill, and Exercise of Command—Instruction concerned with the definition of and necessity for military discipline. Activities include school of drill for the Marine with and without arms, and drill for foot troops including squad, platoon, and company drill. A minimum of six hours of Marine Corps physical training methods and techniques, including administration of the Marine Corps recruit physical fitness tests, is an integral portion of the program. Characteristics of military commands and orders; development of the command voice; ceremonies, reviews, parades, escorts, and inspections; and interior guard duty are emphasized in instruction.

22.04 01 08 00 Weapons—Instruction in weapons which emphasizes familiarization with the U.S. Rifle Caliber .30 M1, and a detailed study of the U.S. Rifle, 7.62mm M-14, and includes description, characteristics, disassembly and assembly, functioning, operations, stoppages and immediate action; spare parts, accessories, ammunition, care and cleaning; and familiarization with the bayonet, the hand grenade, and the M79 grenade launcher.

22.04 01 09 00 Marksmanship—Study and practice of the principles of marksmanship. Included are demonstrations and student participation in sighting and aiming positions, trigger squeeze, sling adjustment, range procedures, and emphasis on safety precautions; range practice with the caliber .22 rifle; and matches and competition with the caliber .22 rifle as practicable.

22.04 01 99 00 Other Military Training I—Include here other organized subject matter and experiences emphasized in Military Training I which are not listed above. (Specify.)

22.04 02 00 00 **Military Training II—An extension of Military Training I, including classroom instruction and application in and out of school emphasizing aspects of basic military training such as Leadership, Drill and Exercise of Command; Small Unit Infantry Tactics; Map Reading and Use of the Compass; and Individual Training for Atomic Warfare.**

22.04 02 01 00 Military Organization—A review of previous instruction in military organization. Extended emphasis is on organization of the rifle platoon of the rifle company, a brief resume of the position of the rifle company in the infantry battalion, and the position of the battalion in the infantry regiment. Attention is given to the position of the Marine Corps in the national defense structure.

22.04 02 02 00 Leadership, Drill, and Exercise of Command—An extension of previous instruction in leadership, drill, and exercise of command. Morale, essentiality of leadership, command presence, understanding people, and drill of the Marine with and without arms are emphasized. Also included are squad and platoon drill, parades, reviews, inspections, ceremonies, interior guard duty, and Marine Corps methods of physical training.

22.04 02 03 00 Weapons—A review of the M-1 rifle and M-14 rifle with an extended study of weapons, including the U.S. Pistol Caliber .45 M1911A1: Its characteristics, general data, disassembly and assembly, safe-handling procedures, and functioning. Also provided is familiarization with the M-72 Light Antitank Weapon.

22.04 02 04 00 Marksmanship—A review of material and experiences in marksmanship presented during previous year. Demonstration and student participation in sustained fire exercises; effect of wind; scorebook; sight seeing and target dimensions; and matches and competitions with caliber .22 rifle as practicable, are emphasized.

22.04 02 05 00 Small Unit Infantry Tactics—Subject matter and experiences concerned with organization of the Marine rifle squad, emphasizing duties of each squad member and the organization patrols. Included are arm and hand signals; individual protection of the Marine; elementary camouflage; duties of scouts and leaders, scouting by day and night, information, and observing and reporting; form of reports; prisoners, principles of security, and outguards and outposts; tactics of the squad on attack/defense; security missions, including troop-leading procedure, orders, and defense of obstacles; and technique of fire of the individual and the squad.

22.04 02 06 00 Map Reading and Use of the Compass—Subject matter and experiences which provide an introduction to map reading and uses of the compass. Marginal information, conventional signs, military symbols, measuring map distances, grid coordinates, elevation, locating and direction, determining direction with and without compass, orientation of maps, and preparation of overlays are included.

22.04 02 07 00 Indivdual Training for Atomic Warfare—Subject matter which is concerned with the general characteristics of atomic warfare and individual protective measures and techniques. Emphasized in instruction are the effects and damages that atomic weapons produce; limitations and capabilities of atomic weapons; and individual actions required when atomic weapons are utilized.

22.04 02 99 00 Other Military Training II—Include here other organized subject matter and experiences emphasized in Military Training II which are not listed above. (Specify.)

22.04 03 00 00 **Military Training III—An extension of Military Training I and II, including classroom instruction and application in and out of school emphasizing aspects of basic military training such as History and Traditions of the Marine Corps; Leadership, Drill, and Exercise of Command; Weapons; Marksmanship; Maps and Aerial Photographs; Small Unit Tactics; Infantry; Military Teaching Methods; New Developments; Organization of the Marine Corps; and Military Service: Opportunities, Obligations, and Benefits.**

22.04 03 01 00 History and Traditions of the Marine Corps—Subject matter comprised of a short resume of Marine Corps history and expansion of Marine Corps campaigns and battles during World War II, Korea, and Vietnam. Biographical sketches of prominent Marine leaders, past and present; specific examples of personal heroism and unit gallantry in the Marine Corps; hardships endured and sacrifices made by the Marine Corps for the Nation; famous mottoes, slogans, and colorful traditions of the Marine Corps; contributions of the Marine Corps to the Nation throughout history in defense of the country; and the role of the Marine in a democracy are emphasized. Also included in instruction is a review of the Code of Conduct for members of the Armed Forces of the United States.

22.04 03 02 00	Leadership, Drill, and Exercise of Command—An extension of previous instruction in leadership, drill, and exercise of command. Psychological factors of leadership, actions of a leader, self-analsis, and attitudes of officers and noncommissioned officers; preparation for command, communication of orders, and methods of giving commands; platoon and company drill, parades, reviews; and inspections and ceremonies are emphasized.
22.04 03 03 00	Weapons—A review of weapons studied during the first and second years with emphasis on the M–14 rifle. Instruction provides for a brief familiarization with the machine gun 7.62mm M–60, the 60mm and 81mm mortars, and the 106mm recoilless rifle, including characteristics, capabilities, and types of ammunition.
22.04 03 04 00	Marksmanship—A review of the rifle marksmanship. Additional training includes sighting and aiming; positions, trigger squeeze, sustained fire, windage, scorebook, and sight setting; stimulation of interest in marksmanship through range practice; and matches and competitions utilizing small-bore facilities as available.
22.04 03 05 00	Maps and Aerial Photographs—Subject matter designed to provide a thorough review of previous instruction in map skills. A brief introduction to aerial photographs and photomaps, including the types used by the Marine Corps, identification, orientation, and uses are emphasized.
22.04 03 06 00	Small Unit Tactics: Infantry—Subject matter designed to provide a brief review of previous instruction in small unit tactics. Combat formations of the rifle platoon, including arm and hand signals; duties of the platoon leader; the rifle platoon, reinforced with elements of the weapons platoon in the attack, defense, and withdrawal—including the use of firepower, reconnaissance, security measures, and combat intelligence; the use of cover, concealment, and observation; and battlefield firing positions are all emphasized.
22.04 03 07 00	Military Teaching Methods—Subject matter comprising an introduction to military teaching methods. Included are selected aspects of instructional techniques and used in planning and presenting instruction; speech techniques for the instructor; the construction and use of lesson plans and training aids; and familiarization of cadets with methods of military instruction to enable them to conduct elementary instruction in basic military subjects.
22.04 03 08 00	New Developments—Subject matter concerned with current unclassified developments in organizations, tactics, weapons, techniques, and material of the Marine Corps. Methods used to develop new equipment are also included.
22.04 03 09 00	Organization of the Marine Corps—A study of the mission and role of the Marine Corps. The supply, service, and maintenance contributions of the technical and administrative services, including close combat support, are emphasized.
22.04 03 10 00	Military Service: Opportunities, Obligations, and Benefits—Subject matter which emphasizes opportunities for both officer and enlisted careers in the Marine Corps. The Selective Service Act of 1948, the Universal Military Training and Service Act, and the Marine Corps Reserve are studied. Information on the United States Naval Academy (USNA), including opportunity for appointment, history, and traditions of the USNA, and operations of the USNA Corps of Midshipmen; information concerning the NROTC (Marine Option) program and the Naval Enlisted Scientific Education Program (NESEP); and general information on the Marine Corps Officer Candidate and Platoon Leaders Course Programs, and the Warrant Officer and LDO Programs, are emphasized.
22.04 03 99 00	Other Military Training III—Include here other organized subject matter and experiences emphasized in Military Training III which are not listed above. (Specify.)
22.04 99 00 00	**Other Marine Corps Junior ROTC**—Include here other subject matter and experiences emphasized in the Marine Corps Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)

Glossary

The glossary contains definitions of terms used but not defined in the context of this handbook and such additional terms as seem necessary to common understanding underlying records and reports about curriculum and instruction in elementary, secondary, junior college and adult education. Terms defined elsewhere in this handbook may be located through the use of the index or through the classifications of chapters 3 and 5.

This glossary is arranged alphabetically and includes a limited amount of cross-referencing. Where reference is made to a term included in the glossary, no page number is given; however, a page number is included where reference is made to a term in another portion of the handbook. Multiworded terms are not inverted; groups of terms having common words may be located by using the index.

Many of the definitions have been taken directly from the previous handbooks of the State Educational Records and Reports Series: Handbooks I,[1] II,[2] III,[3] IV,[4] and V.[5] The respective handbooks from which definitions have been taken are indicated by the Roman numeral designation of the handbook or, in the case of the handbook *Financial Accounting for School Activities*,[6] by the letters (FASA). Notation is included for those instances in which definitions from preceding handbooks have been modified to clarify their meaning when used to describe aspects of instructional programs.

Acceleration—The completion of a predetermined amount of schoolwork in less time than is required normally.

Administrative Unit—A geographic area which, for specified public school purposes, is under the control of a board of education and the supervision of one or more administrative officers. (Handbook I, clarified; Handbooks IV and V, clarified)

Adult—An individual who has reached a specified minimum legal age of adulthood, usually 18 years. (Handbooks IV and V, modified)

Adult Basic Education—Education at the elementary instructional level (through the eighth grade)—usually with emphasis on communicative, computational, and social skills—given to enable an adult or youth beyond the age of compulsory school attendance to raise his level of education, pursue a program of occupational training, and/or function more adequately as a citizen in a democratic society.

Adult Education—Instruction designed to meet the unique needs of adults and youth—beyond the age of compulsory school attendance—who have either completed or interrupted their formal education. This may be provided by a school system, college, or other agency or institution (including a technical institute or area vocational school) through activities and media such as formal classes, correspondence study, radio, television, lectures, concerts, demonstrations, and counseling.

Adult Education Program—A program of instruction primarily for adults and youth beyond the age of compulsory school attendance. (Handbook V, modified) *See also **Adult Education**.*

---

[1] Paul L. Reason, Emery M. Foster, and Robert F. Will, *The Common Core of State Educational Information*. Washington: U.S. Government Printing Office, 1953. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook I, Bulletin 1953, No. 8.

[2] Paul L. Reason and Alpheus L. White, *Financial Accounting for Local and State School Systems: Standard Receipt and Expenditure Accounts*. Washington: U.S. Government Printing Office, 1957. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series Handbook II, Bulletin 1957, No. 4.

[3] Paul L. Reason and George G. Tankard, Jr., *Property Accounting for Local and State School Systems*. Washington: U.S. Government Printing Office, 1959. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook III, Bulletin 1959, No. 22.

[4] Allan R. Lichtenberger and Richard J. Penrod, *Staff Accounting for Local and State School Systems*. Washington: U.S. Government Printing Office, 1965. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook IV, Bulletin 1965, No. 18.

[5] John F. Putnam and George G. Tankard, Jr., *Pupil Accounting for Local and State School Systems*. Washington: U.S. Government Printing Office, 1964. U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook V, Bulletin 1964, No. 39.

[6] Everett V. Samuelson, George G. Tankard, Jr., and Hoyt W. Pope, *Financial Accounting for School Activities*. Washington: U.S. Government Printing Office, 1959. U.S. Department of Health, Education, and Welfare, Office of Education, Bulletin 1959, No. 21.

Adult School—A separately organized school providing instruction for adults and youth beyond the age of compulsory school attendance. (Handbook V, modified)

Apprentice—A worker who is learning a recognized occupation in accordance with a written apprentice-training contract between him and his employer or employers which provides for a given period of planned work experience through employment on the job, supplemented by appropriate related instruction, and with other specified provisions of the arrangement.

Apprenticeship Training—An organized system for providing young people with the manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. The program usually involves cooperation among schools, labor, and management, since apprentices learn the skills of their craft through on-the-job work experiences, and the related theoretical information through classroom instruction. The minimum terms and conditions of apprenticeship are regulated by State and local statutes or agreements.

Area Vocational School—A public school which has been approved by the State board for vocational education to provide instruction in the occupations (other than professional occupations) to residents of a State, a county, a major city, or another designated geographic area usually larger than one local basic administrative unit. (Handbooks IV and V, clarified)

Atypical Characteristic—A characteristic of an individual in a given chronological age group which is markedly different from that of the mean. (V) *See also **Type of Exceptionality*** and ***Exceptional Children.***

Atypical Pupil—A pupil revealing a physical, mental, or behavioral characteristic which is markedly different from that of the mean of his chronological age group. (V) *See also **Atypical Characteristic, Exceptional Children,*** and ***Exceptional Pupils.***

Audiolingual Approach—An approach to language instruction emphasizing that element of language (sound) which is spoken in normal, everyday, conversational interchange as differentialized from language as gesture or as writing. This sometimes is referred to as the "aural-oral" approach.

Auditory Handicap—An impairment in hearing that adversely affects the performance of an individual. A person identified as having an auditory handicap may be referred to as "hard of hearing" or "deaf," according to the nature and severity of his handicap. (V)

Average Daily Attendance—The aggregate days attendance of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term. The average daily attendance for groups of schools having varying lengths of terms is the sum of the average daily attendances obtained for the individual schools. (Handbooks I, II, and III, modified) (IV) (V)

Average Daily Membership—The aggregate days membership of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term. The average daily membership for groups of schools having varying lengths of terms is the sum of the average daily memberships obtained for the individual schools. For purposes of obtaining statistical comparability *only*, pupil-staff ratios involving kindergarten and prekindergarten pupils attending a half-day session are computed as though these pupils are in membership for a half day. (Handbooks I, II, and III, modified; Handbooks IV and V, clarified)

Average Membership Per School—The total membership of schools in a reporting unit, as of a given date, divided by the number of schools in the unit. (V)

Average Number of Children Per Attendance Area—The total number of children of school age in an administrative unit divided by the number of attendance areas within the administrative unit. (V)

Average Number of Children Per Local Basic Administrative Unit—The total number of children of school age in a given State (or intermediate unit) divided by the number of local basic administrative units within the State (or intermediate unit). (V)

Bachelor's Degree—A degree usually conferred upon the successful completion of a 4-year college program of studies. (IV) (V)

Balance—A purposeful variety in aims and objectives for pupils supported by an overall plan for instruction having flexibility in required and optional areas of content to be studied and diversity in types of learning experiences.

Basic Education—A term frequently used in referring to education emphasizing literacy in language, mathematics, natural sciences, and history and related social sciences. *See also **Adult Basic Education.***

Boarding School—*See **Residential School**,* page 61.

Branch Campus—A campus of an educational institution (usually an institution of higher education) which is located in a community different from that of its parent institution and beyond a reasonable commuting distance from the main campus of the parent institution.

Business School—A nonpublic educational institution offering courses in preparation for business occupations such as stenography, bookkeeping, and data processing. Such an institution frequently is referred to as a "Private Business School" or "Business College."

Cafeteria or Lunchroom—An area designed, or adapted, specifically for use in preparing meals for, or serving meals to, the student body or other groups, and providing facilities for eating such meals. (III)

Casework—The application of the casework method. As used in this handbook, this involves thorough studies of individual pupils by staff members skilled in the casework method. (IV)

Certificate of Training—*See **Certificate of Completion**,* page 85.

Classroom Teacher—A staff member assigned the professional activities of instructing pupils—in self-contained classes or courses—in classroom situations for which daily pupil attendance figures for the school system are kept. (Handbook IV, clarified)

Classroom Teachers Per 1,000 Pupils in Average Daily Membership—The number representing the total full-time equivalency of classroom teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership (ADM) of pupils during this period. (V)

Combined Community College and Secondary School Plant—A school plant that houses on a permanent basis two schools only—a secondary school and a community college. (III) (V)

Combined Elementary and Secondary School Plant—A school plant that houses on a permanent basis two schools only—an elementary school and a secondary school. (Handbooks I and II, modified) (III) (IV) (V)

Glossary—Continued

Community College—As used in this handbook, a junior college operated by the board of education of a local basic administrative unit (including the independent local board for one or more community colleges). Instruction is adapted in content, level, and schedule to the needs of the local community. (Handbooks I, II, and III, modified) (IV) (V) *See also* ***Junior College***, page 61.

Completion of School Work—Completing a program of studies and withdrawing from school. This includes graduation from high school (grade 12) or college, or otherwise fulfilling the requirements for a prescribed program of studies. Midyear or yearend transfer to a higher grade within the same school is not considered as completion of schoolwork. (V)

Comprehensive High School—A secondary school with a number of departments (e.g., English, science, business, vocational) offering a diversified program to meet the needs of pupils with varying interests and abilities. (Handbooks IV and V, clarified)

Computer Assisted Instruction—Programmed instruction utilizing an electronic computer as the principal medium of instruction.

Concept—An idea or mental image of what a thing in general should be, especially a representation of the common elements or attributes distinguishing one group of objects or ideas from other groups.

Congressional District—A geographical area within a State, defined for electoral purposes and identified by a number or code.

Continuing Education—A term used synonymously with the term "adult education". *See* ***Adult Education***.

Continuity—The orderly, planned sequence of educational experiences, as from one grade, school level, stage of development, or aspect of subject-matter content to another.

Contracted Services—Those services rendered to the school system through contract or other agreement with a firm, company, individual, or other educational agency or institution, such services being performed by a person or persons not on the school staff.

Cooperative Education—A combination program of study and practice—conducted on an alternating schedule of half days, days, weeks, or other periods of time—providing legal employment for pupils with organized on-the-job training and correlated school instruction.

Cooperative On-the-job Training—An activity in which pupils in occupational programs of studies spend a portion of their time in supervised employment (i.e., in on-the-job training) in business or industry. This activity frequently is referred to as "cooperative work experience."

Cooperative Part-time Employment—Part-time employment combined with schoolwork through cooperation between the school and business or industry.

Cooperative Work Experience—*See* ***Cooperative on-the-job Training***.

Correlation—A plan whereby teachers of courses in two or more subject-matter areas endeavor to relate the work of a given group of pupils in these areas to common large problems.

Course of Study—A written guide prepared by administrators, supervisors, consultants, and teachers of a school system or school as an aid to teaching a given course or an aspect of subject-matter content to a given type of pupil. *See also* ***Curriculum Guide***.

Credit—The unit of value, awarded for the successful completion of certain courses, intended to indicate the quantity of course instruction in relation to the total requirements for a diploma, certificate, or degree. Credits frequently are expressed in terms such as "Carnegie units," "credits," "semester credit hours," and "quarter credit hours." (IV) (V)

Crisis Teacher—A teacher, specially trained both in remedial education and in helping pupils overcome emotional problems, serving a single school by providing immediate help to individual pupils at times when they are unable to cope with their usual classroom situations. This periodic assistance is intended to enable pupils with behavioral difficulties (which may or may not be accompanied by academic difficulties) to return to their usual classrooms. Close liaison is maintained with classroom teachers and supporting services, and referrals are made as required for diagnosis and intensive help.

Cultural Handicap—As used in this handbook, a deviation or deficiency in cultural or environmental background that adversely affects the school performance or learning of an individual. Individuals with cultural handicaps may be classified into groups such as: migrant children, functionally illiterate, the non-English speaking, and members of disadvantaged cultural groups.

Current Expenditures—Total expenditures for administration, instruction, attendance and health services, pupil transportation services, operation of plant, maintenance of plant, and fixed charges plus net expenditures for food services and student body activities. Basically, this encompasses all expenditures except those for capital outlay, community services, and debt service, as included in the 100 series of accounts through the 800 series of accounts of Handbook II plus net expenditures for food services and student body activities. (Handbooks I, II, and III and FASA, modified)

Current Expenditures Per Pupil—Current expenditures for a given period of time divided by a pupil unit of measure. (Handbooks II and V, modified) *See also* ***Current Expenditures*** and ***Pupil Unit of Measure***.

Current Expenditures Per Pupil in ADA (Regular School Term)—Current expenditures for the regular school term divided by the average daily attendance of full-time pupils (or full-time equivalency of pupils) during the term. *See also* ***Current Expenditures*** and ***Average Daily Attendance***.

Current Expenditures Per Pupil in ADA (Summer School Term)—Current expenditures for the summer school term divided by the full-time equivalency of pupils in average daily attendance during the term. *See also* ***Current Expenditures*** and ***Full-Time Equivalency***.

Current Expenditures Per Pupil in ADM (Regular School Term)—Current expenditures for the regular school term divided by the average daily membership of full-time pupils (or full-time equivalency of pupils) during the term. *See also* ***Current Expenditures*** and ***Average Daily Membership***.

Current Expenditures Per Pupil in ADM (Summer School Term)—Current expenditures for the summer school term divided by the full-time equivalency of pupils in average daily membership during the term. *See also* ***Current Expenditures*** and ***Full-Time Equivalency***.

Current Expenditures Per Pupil Per Day (ADA)—Current expenditures per pupil in average daily attendance during a given school term, divided by the number of days school was in session during this term. (Handbook V, clarified) *See also* ***Current Expenditures*** and ***Average Daily Attendance***.

Current Expenditures Per Pupil Per Day (ADM)—Current expenditures per pupil in average daily membership during a given school term, divided by the number of days school was in session during this term. (Handbook V, clarified) *See also* ***Current Expenditures*** and ***Average Daily Membership***.

Glossary—Continued

Current Expenditures Per Pupil Per Hour Course Meets (Adult Education)—Current expenditures for adult education (for a given period of time) divided by aggregated pupil hours. Aggregated pupil hours refers to the total, for all courses, of the enrollment for each course times the number of hours the course meets. (NOTE: This item may be used in any situation where there is a significant proportion of part-time pupils.) *See also* ***Current Expenditures.***

Curriculum Guide—A written plan including one or more aspects of curriculum and instruction such as philosophy, policies, aims, objectives, subject matter, resources, and processes. Such a plan may be as narrow in scope as a unit or topic of instruction, or as broad as the entire curriculum of a school system or level of instruction within a State. *See also* ***Course of Study.***

Custodial Mentally Retarded—*See* ***Severely Mentally Retarded,*** page 82.

Cycle Scheduling—A scheduling plan, usually in junior high schools, wherein courses which might be taught one or two periods each week throughout the term are taught every day for a succession of weeks. For example, art, music, and industrial arts might be "cycled" in a 36-week term for 12 weeks each.

Degree—A title conferred by a college or university as official recognition for the completion of a program of studies or for other attainment. (IV) (V)

Delinquent Behavior—Behavior of a juvenile which is habitually wayward, disobedient, truant, or of such a nature as to impair or endanger the morals or health of self or others. If a juvenile violates a law or ordinance and is convicted in a court of law as a juvenile, he *sometimes* is considered a juvenile delinquent, depending on the severity of the violation; for repeated convictions of lesser offenses, he *usually* is considered a juvenile delinquent. Some jurisdictions use a term other than "conviction" in juvenile cases. (V) *See also* ***Juvenile Delinquent.***

Department—As used in this handbook, an administrative subdivision of a school with a teaching staff responsible for instruction in a particular subject-matter area or field of study, (e.g., English department, vocational department, science department, music department). (Handbooks IV and V, clarified)

Departmentalized Organization—The organization of instruction in such a way that teachers specialize in one or two subject-matter areas and give instruction in these areas to several classes. Under the departmentalized organization, pupils or teachers move from room to room for different classes during the school day. (Handbooks IV and V, clarified)

Diagnostic Teacher—A teacher possessing special training and skills in diagnosing learning problems of individuals and in planning and providing therapeutic educational programs based on such diagnoses.

Differentiation—A plan making provision for individualized needs of the various pupils by enrichment or other modification of a common basic program.

Discipline—A broad, logically organized body of subject matter which is distinguished by its scholarly prestige.

Dual Enrollment—An arrangement whereby a pupil regularly and concurrently attends two schools which share direction and control of his studies. For example, the pupil attends a public school part-time and a nonpublic school part-time, pursuing part of his elementary or secondary studies under the direction and control of the public school and the remaining part under the direction and control of the nonpublic school; or, he attends a public secondary school part-time and an area vocational school part-time with the direction and control of his studies similarly shared by the two institutions.

Early Childhood Education—Educational experiences provided by the school at the preprimary and primary levels.

Elementary Instructional Level—The general level of instruction provided for pupils in elementary schools, and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (IV) (V)

Emotional Handicap—An impairment or deficiency of the emotions that adversely affects the stability and/or performance of an individual. (V)

Enrichment Program—Supplementary instructional experiences provided pupils according to their special needs, abilities, and interest. For preschool or preprimary culturally deprived children, this refers to experiences designed to aid in their transition from home to a school environment; emphasis is on language development in preparation for reading instruction; and, frequently, such programs are supplemented by counseling with parents and with home visits by school staff members. For other pupils, such as the gifted, talented, or college bound, this term refers to special instructional experiences provided in addition to instruction generally provided most pupils.

Equipment—Any instrument, machine, apparatus, or set of articles which (a) retains its original shape and appearance with use and (b) is nonexpendable; i.e., if the article is damaged or some of its parts are lost or worn out, it is usually more feasible to repair it than to replace it with an entirely new unit. (Handbooks II and III, modified, based on the wording of P.L. 89–329.) *See also* page 9.

Exceptional Children—As used in this handbook, children who, because of certain atypical characteristics, have been identified by professionally qualified personnel as requiring special educational planning and services, whether or not such services are available. In general, the term "exceptional children" considers exceptionality on the basis of (a) physical handicap, (b) emotional and/or social handicap, and (c) measurable exceptionality in mental ability, i.e., mentally gifted and mentally retarded. Some exceptional children have more than one type of exceptionality. (Handbooks I and III, modified) (V)

Exceptional Pupils—Exceptional children, and adults identified as exceptional, receiving instruction in a program of special education. (V) *See also* ***Exceptional Children*** and ***Special Education.***

Exceptionality—As used in this handbook, a physical, mental, or behavioral characteristic by which technically or professionally qualified personnel identify individuals as significantly deviant in terms of their age group. (V) *See also* ***Exceptional Children.***

Excess Membership in Public Schools—Membership in excess of the normal pupil capacity of accessible publicly owned school plants in use. This includes any public school pupils housed in nonpublicly owned quarters or makeshift or improvised facilities as well as those who are in excess of the normal capacity in permanent publicly owned school plants. (Based on Handbook I) (V)

Extended-Day Sessions—A school day with separate times for different groups of pupils to start and end their sessions in the same school plant; e.g., high school juniors and seniors begin their session at 7:30 a.m. and the freshmen and sophomores begin their session at 8:30 a.m., the session for juniors and seniors ending one hour prior to the time the session ends for the freshmen and sophomores. (V)

Extended School Day—The part of the calendar day, following the daily session, when school-related activities and recreation are provided pupils by the school.

Extended Secondary School—*See* ***Community College.***

Extension Work—Generally, instructional activities other than those connected with the instruction of pupils on the campus. Extension work includes correspondence study, classes for part-time pupils off the campus or at unusual hours on the campus, and similar instructional arrangements.

Extraclass Activities—*See* description of ***Cocurricular Activities*** on pages 47 and 242.

Fee—A payment, charge, or compensation for services (other than instruction), for privileges, or for the use of equipment, books, or other goods.

Final Mark—A mark, given to a pupil upon the completion of study in a course or subject-matter area of a self-contained class, which represents an evaluation of the work done for the entire course or area and is entered upon the permanent records of the pupil. (Handbook V, expanded) *See also* ***Mark***.

Flexible Scheduling—An organization for instruction allowing for varying class sizes within and among courses, and providing for instructional groups which meet at varying frequencies and for varying lengths of time.

Followup Study—A study made of the experiences or status of former pupils, either for the purpose of assisting them in further adjustment or for securing information to help improve instruction or guidance for those still in school. In vocational education, this term refers to a research activity designed to determine what occupations are pursued by graduates and/or other former pupils in occupational programs, and how effective was their preparation in relationship to job requirements.

Forum—A public meeting at which topics are discussed by leaders and the audience. (V)

Full-time Equivalency—The amount of time spent or required in a less than full-time activity divided by the amount of time normally spent or required in a corresponding full-time activity during the regular school term. Full-time equivalency usually is expressed as a decimal fraction to the nearest tenth.

Full-time Pupil—A pupil who is carrying a full course load as determined by the State or the local school system. (V)

Gainful Employment—Employment in a recognized occupation for which persons normally receive a wage, salary, fee, or profit.

Graded School—A school composed of separate standard grades or combinations of grades which serve as the basis for assigning pupils to classes.

Half-day Session—A school session which contains the minimum number of hours recommended by many State education agencies for kindergarten or prekindergarten instruction, when the length of this session approximates half the number of hours recommended for a full-day session in other elementary grades. Kindergarten and prekindergarten pupils attending a half-day session are in membership for the full day. However, for purposes of obtaining statistical comparability *only*, pupil-staff ratios involving these pupils are computed as though these pupils were in membership for a half day. (Handbook V, clarified)

Handicap—An atypical physical, mental, or behavioral condition that adversely affects the performance of an individual. (V)

Higher Education—Education above the level of the secondary school, usually beginning with grade 13, which is provided by colleges, universities, graduate schools, professional schools, and technical institutes.

High School Postgraduate—A pupil who, after graduating from high school (grade 12), enters a secondary school for additional school work. (IV) (V)

Homebound Instruction—*See* ***Instruction for Homebound Pupil***.

Homebound Pupil—A pupil who is unable to attend classes and for whom instruction is provided at home by a teacher. (V) *See also* ***Instruction for Homebound Pupil***.

Homework—School assignments—in preparation for a given course or subject-matter area—to be completed within a specified time limit and during nonclass time.

Hospital Instruction—Instruction provided in a hospital, sanitorium, or convalescent home. (V)

Humanities—Subject matter—which may embrace literature, languages, history, music, art, and philosophy (or any combination of these)—planned to acquaint man with his origins and neighbors, including the thoughts, creations, and actions of his predecessors through the ages. The humanities are a record of what man over the centuries has felt, thought, and done in his search for answers to questions about human concerns such as personal identity, origins, meaning of life, and destiny.

Incomplete High School—A secondary school which offers less than four full years of work beyond grade 8 in a school system that is organized in such a manner that grades PreK, K, or 1 through 8 constitute the elementary grades. These are sometimes called "truncated high schools." (Handbooks I, II, III, IV, and V, clarified)

Individual Instruction—An arrangement whereby a pupil receives instruction as an individual and not as a part of a class. (V)

In-school Instruction—Instruction received by a pupil within the school plant. (V)

Instruction for Homebound Pupil—Individual instruction by a teacher, usually at the home of a pupil who is unable to attend classes. In some instances, such instruction is augmented by telephone communication between the classroom and the pupil or by other means. (V) (Handbook IV, extended)

Instructional Level—An indication of the general nature and difficulty of instruction, e.g., elementary instructional level, secondary instructional level, and postsecondary instructional level. (V)

Instructional Materials Center—An instructional space where school library services and audiovisual services are integrated. When such services are limited to one or more specific subject areas, the space may be referred to as a "resource center." For inventory purposes, an instructional materials center is considered to be a school library instructional space as identified under item X3520.31 on page 98. *See also* ***Resource Center***.

Integration—The process of combining subject-matter content from various subject-matter areas into one unified course, project, or unit, e.g., interrelating the teaching of history, geography, science, art, music, and English language arts in the study of the Westward Movement.

Intermediate Administrative Unit—An administrative unit smaller than the State which exists primarily to provide consultative, advisory, administrative, or statistical services to local basic administrative units, or to exercise certain regulatory and inspectoral functions over local basic administrative units. An intermediate unit may operate schools and contract for school services, but it does not exist primarily to render such services. Such units may or may not have taxing and bonding authority. Where there is a supervisory union board, the union is included as an intermediate unit. (Handbooks I and II, clarified) (IV) (V)

Intermediate Elementary Grades—The grades between the primary grades and the upper elementary grades or the junior high school grades, usually grades 4, 5, and 6. (IV) (V)

Glossary—Continued

Interscholastic Athletics—Organized games and athletic activities engaged in by pupils specifically trained for such purposes with similarly trained pupils from other schools. (FASA, clarified)

Intramural Athletics—Organized games and athletic activities engaged in by pupils of a school with other pupils from the same school. The intramural program may be an integral part of the physical education program or a distinctive program of its own; in either case, the program must be confined to a single school. (FASA)

Item of Information—As used in this handbook, a descriptive heading under which is recorded information about curriculum and instruction.

Juvenile Delinquent—An offender against the laws of society who, because of his age, is not considered a criminal. While the term "juvenile delinquent" often is applied to all youthful offenders tried in juvenile court, these children technically are not legally delinquent until adjudged so by the court. (V) *See also* ***Delinquent Behavior.***

Kindergarten—A group or class organized to provide educational experiences for children during the year or years immediately preceding the first grade, which are a part of the elementary school program and are under the direction of a professionally qualified teacher. A kindergarten class may be organized as a grade of an elementary school. In some school systems, such a group is called "preprimary" or "junior primary." (Handbooks IV and V, modified)

Laboratory, Model, or Practice School—An elementary or secondary school in which part or all of the teaching staff consists of cadet or student teachers and the control and operation of the school rests with an institution which prepares teachers. (Handbook I, clarified) (V)

Language Handicap—As used in this handbook, language usage which deviates from that of the school setting to the extent that it interferes with communication. Such deviation may occur in the reception and production as well as in the meaningful use of speech sounds, vocabulary, and/or rules of word order of the linguistic system of the school. A person who correctly speaks a foreign language or a dialect is not considered to have a language handicap where the foreign language or dialect is used. However, a pupil lacking competence in the language of instruction is considered to have a language handicap in the school setting. *See also* ***Speech Handicap*** and item X0945.20 on page 81, ***Inability to Speak Language of Instruction.***

Language Laboratory—A room equipped for language instruction in which tape recorders, projectors, record players, and other devices are used singly or in combination.

Lay Readers—Persons, usually housewives who are college graduates, who are not teachers but who read and help mark English compositions on a part-time basis under the supervision of a fully qualified classroom teacher.

Learning Resources Center—*See* ***Instructional Materials Center.***

Level of Performance—A predetermined level or stage of performance, or degree of proficiency, as designated by a school or school system.

Library Books Per Pupil—The number of volumes of library books in the library(s) of a school or school system divided by a pupil unit of measure. *See also* ***Pupil Unit of Measure.***

Local Basic Administrative Unit—An administrative unit at the local level which exists primarily to operate public schools or to contract for public school services. Normally, taxes can be levied by such units for school purposes. These units may or may not be coterminous with county, city, or town boundaries. This term is used synonymously with the terms "school district" and "local education agency." (Handbooks I, II, and III, clarified; Handbooks IV and V, clarified)

Local Education Agency—A term used synonomously with the term "local basic administrative unit." *See* ***Local Basic Administrative Unit.***

Mark—A rating of achievement or academic progress assigned on the basis of some predetermined scale; e.g., letters (A, B, C, D, F), numbers (4, 3, 2, 1, 0), words or phrases (outstanding, satisfactory, needs improvement), and percentages. (V)

Measure—A unit of measurement to which reference may be made for purposes of description, comparison, and evaluation. Many measures are obtained by computation involving one or more items of information. (IV) (V)

Median Age of Pupils—For a given group of pupils, the age that evenly divides the distribution of pupils when classified by age, i.e., the age so selected that 50 percent of the total number of pupils is older and 50 percent is younger. (V)

Mental Handicap—An impairment in learning potential that adversely affects the performance of an individual. (V) *See also* ***Mental Retardation.***

Mentally Deficient—*See* ***Mentally Retarded,*** page 82.

Migrant Worker—An individual whose primary employment is on a seasonal or other temporary basis and who establishes a temporary residence, with or without his family, for the purpose of such employment. (V)

Mobile Classroom—A vehicle which serves as a classroom and which may be moved readily at any time. (III) *See also* **Vehicle.**

Model—A scale replica or representation of reality. The scale may be miniature, exact size, or enlargement, and the model itself may or may not be manipulative.

Model School—*See* ***Laboratory, Model, or Practice School.***

Moderately Mentally Retarded—*See* ***Educable Mentally Retarded,*** page 82.

Multigrade Class—A class composed of pupils in 2 or more grades and having no particular differences in learning experiences due to grade standing of pupils, e.g., a secondary school general science class for freshmen and sophomores. *See also* ***Multigraded Class*** and ***Ungraded Class.***

Multigraded Class—A class including more than one grade and in which pupils may be identified by grade level, e.g., the single class of a one-teacher school or one-room elementary school. *See also* ***Multigrade Class*** and ***Ungraded Class.***

Multiple-Car Range—A special off-street facility for in-car laboratory instruction where several automobiles may operate simultaneously under the direction of one or more teachers positioned outside the vehicles.

Neighborhood School—A school within easy walking distance of the pupils' homes.

Noncourse Activities—*See* description of ***Cocurricular Activities*** on pages 47 and 242.

Noncredit Course—A course for which pupils do not receive credit applicable toward graduation or completion of a program of studies. (V, edited)

Non-English Speaking—A term referring to pupils who do not speak English or who do not hear English spoken in their residence.

Nongraded Class—*See* ***Ungraded Class.***

Nongraded School—*See* ***Ungraded School.***

Glossary—Continued

Nursery School—A separately organized and administered elementary school, for groups of children during the year or years preceding kindergarten, which provides educational experiences under the direction of professionally qualified teachers. (Handbooks I, II, and III, modified; Handbook IV, modified)

Occupational Field—A group of recognized occupations having many similarities, including the following characteristics in common: the type of work performed; the basic aptitudes, and the acquired knowledge and training required; the tools, machines, instruments, and other equipment used; and the basic materials used.

One-teacher School—A school in which one teacher is employed to teach all grades authorized in the school, regardless of the number of rooms in the building. There are two classifications of one-teacher schools used in Handbook I: (a) those with four or less grades, and (b) those with five or more grades. During some years, there may be grades in which no pupils are enrolled. (Handbook I, clarified)

On-the-job-Training—A program of instruction provided to an employed worker by the employer during the normal working hours of the occupation.

Outdoor Education—A means of curriculum enrichment that is experienced in and through the outdoors. In achieving this means of enrichment, instruction is adapted largely to the utilization of resources and activities unique or more appropriate to the outdoor setting, where pupils, instructors, and others may stay for several days.

Part-time General Continuation Class—In vocational education, a class for persons under 18 who have terminated their full-time education in elementary or secondary school to enter upon employment. Such a class is designed to increase civic intelligence rather than to develop specific occupational competence and is conducted during what would be the usual working hours of the enrollees.

Part-time Pupil—A pupil who is carrying less than a full-course load as determined by the State or the local school system. (V)

Percentage of Attendance—The average daily attendance during a given reporting period divided by the average daily membership for the period, expressed as a percentage; or, the aggregate days attendance divided by the aggregate days membership, expressed as a percentage. (V)

Percentage of Exceptional Children in Special Classes or Schools—The number of resident exceptional children entered in special classes or schools, divided by the total number of resident children identified as exceptional, expressed as a percentage. (V)

Percentage of High School Graduates Who Completed Courses in Given Subject Areas—The number of pupils in a given high school graduation group who completed courses in each of a number of specific subject-matter areas, divided by the total number of pupils in the group, expressed as a percentage. (Handbook V, Clarified)

Percentage of Pupils Currently Enrolled in Courses in Given Subject Areas—The number of pupils in a given school group who are enrolled in courses in each of a number of specific subject-matter areas, divided by the total number of pupils in the group, expressed as a percentage. (Handbook V, modified)

Percentage of Pupils in Nonpublic Schools—The number of pupils of a given age group or type of instructional organization entered in nonpublic schools, divided by the total number of pupils in this age group or type of instructional organization entered in all schools, expressed as a percentage. (V)

Percentage of Pupils Making Normal Progress—The number of pupils making normal progress during a given reporting period, divided by the membership at the close of the period, expressed as a percentage. (V)

Percentage of Pupils Not Promoted (or Retained)—The number of pupils who, at the close of a given reporting period (usually a regular school term), are reassigned to the same grade, divided by the membership at the close of the period, expressed as a percentage. Pupils in ungraded classes are not considered "not promoted" unless (and until) they are asked to spend more than the usual amount of time in such classes. (V)

Percentage of Pupils Participating in Various Activities—The number of pupils who, during a given reporting period (e.g., a given regular school term), take part in each of a number of specific activities, divided by the average daily membership of pupils in the group, expressed as a percentage. (V)

Percentage of Pupils Promoted—The number of pupils promoted during or at the close of a given reporting period (usually a regular school term), divided by the membership at the close of the period, expressed as a percentage. For reporting purposes, pupils in ungraded classes who have made satisfactory progress may be considered separately or they may be considered promoted. (V)

Percentage of Total Excess Public School Membership—Total excess membership in public schools divided by the normal pupil capacity of accessible publicly owned school plants in use, expressed as a percentage. (V) *See also* ***Excess Membership in Public Schools and Pupil Capacity of a School Plant.***

Percentage of Total Membership Being Provided Appropriate Special Education—The number of pupils who have been identified as exceptional by professionally qualified personnel and who are being provided appropriate special education, divided by the total membership, expressed as a percentage. These pupils may be considered also in smaller groups according to type of exceptionality, e.g., blind, deaf, mentally retarded, etc. (V)

Permanent Building—A building designed for and constructed on its site and not intended to be moved. (III)

Physical Handicap—An atypical physical condition that adversely affects the performance of an individual. Individuals with marked physical handicaps may be classified into groups such as: the blind, the partially seeing, the deaf, the hard of hearing, the speech impaired, the crippled, and those having special physical health problems resulting from various diseases and conditions. (V)

Portable Building—A building designed and constructed so that it can be disassembled and transported to another location, or transported to another location without disassembling. *See also* ***Mobile Classroom.***

Post High School Level—*See* ***Postsecondary Instructional Level.***

Postsecondary Instructional Level—The general level of instruction provided for pupils in college programs, usually beginning with grade 13, and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (Handbooks IV and V, clarified)

Prekindergarten Class—A group or class organized to provide educational experiences, for children during the year or years preceding the kindergarten, which are a part of the elementary school program and are under the direction of a professionally qualified teacher. A prekindergarten class may be organized as a grade of an elementary school or as a part of a separate nursery school. (This is a modification of the definition for Nursery in Handbooks IV and V)

Preprimary School—A separately organized and administered elementary school for pupils in the year or years preceding the first grade. This may include pupils in the prekindergarten and kindergarten years or grades.

Glossary—Continued

Prerequisite—A course (completed successfully) or other requirement which is necessary as a preliminary to participation in a given activity or succeeding course.

Prevocational Education—Orientation—to a number of different occupational areas—and counseling designed to assist a person in determining the occupational area(s) for which he might best prepare.

Primary Grades—The elementary grades preceding the intermediate grades, usually grades 1, 2, and 3. (IV) (V)

Primary School—A separately organized and administered elementary school for pupils at the primary level, usually including grade 1 through grade 3 or the equivalent, and sometimes including preprimary years.

Principle—A comprehensive generalization describing some fundamental process, constant mode of behavior, or property relating to natural phenomena.

Private or Nonpublic School—A school established by an agency other than the State, subdivisions of the State, or the Federal Government, or established by an individual, which usually is supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials. (Handbooks I and II, modified; Handbooks IV and V modified)

Professional Educational Staff Per 1,000 Pupils in Average Daily Membership—The number representing the total full-time equivalency of professional educational assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of pupils during this period. (IV) (V)

Public School—A school operated by publicly elected or appointed school officials in which the program and activities are under the control of these officials and which is supported primarily by public funds. (Handbooks I, II, III, IV, and V, clarified)

Pupil Capacity of a School Plant—The pupil membership that can be accommodated in the classrooms and other instruction areas of the plant for the school day according to existing State approved standards, exclusive of multiple sessions. (Handbooks III and V, edited) *See also* ***Membership*** in Handbook V and Account 240, Instruction Areas in Building in chapter 2 of Handbook II.

Pupil Unit of Measure—A standard of measurement having a pupil-related factor as its unit. Illustrative pupil units of measure for a period of time include average daily membership, average daily attendance, and full-time equivalency of average daily membership or attendance; pupil units of measure as of a given date include membership, attendance, and full-time equivalency of attendance. *See also* ***Measure.***

Pupil-Classroom Teacher Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of classroom teaching assignments serving these pupils on the same date. (IV) (V)

Pupil-Classroom Teacher Ratio (For a Period of Time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of classroom teaching assignments serving these pupils during the same period. (V)

Pupil-Counselor Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of counseling assignments serving these pupils on the same date. (IV) (V)

Pupil Counselor Ratio (For a Period of Time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of counseling assignments serving these pupils during the same period. (V)

Pupil-Nurse Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of nurse assignments serving these pupils on the same date.

Pupil-Nurse Ratio (For a Period of Time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of nurse assignments serving these pupils during the same period.

Pupil-Principal Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of school direction and management assignments serving these pupils as of the same given date. (IV) (V)

Pupil-Principal Ratio (For a Period of Time)—The average daily membership of pupils in the elementary and secondary schools of a school system, for a given period of time, divided by the number representing the total full-time equivalency of school direction and management assignments serving these pupils during the same period. (V)

Pupil-Professional Educational Staff Ratio (As of a Given Date)—The number of pupils in membership in a school system, as of a given date, divided by the number representing the total full-time equivalency of all professional educational staff assignments in the school system on the same date. (IV) (V)

Pupil-Professional Educational Staff Ratio (For a Period of Time)—The average daily membership of pupils in a school system, for a given period of time, divided by the number representing the total full-time equivalency of all professional educational assignments in the school system during the same period. (V)

Pupil-School Librarian Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of all school librarian assignments serving these pupils as of the same given date. (IV) (V)

Pupil-School Librarian Ratio (For a Period of Time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of school librarian assignments serving these pupils in school libraries during the same period. (V)

Pupil-Teacher Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of all teaching assignments serving these pupils on the same date. (IV) (V)

Pupil-Teacher Ratio (For a Period of Time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of all teaching assignments serving these pupils during the same period. (V)

Pupil-Total Staff Ratio (As of a Given Date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of all staff assignments serving these pupils as of the same given date. (IV) (V)

Pupil-Total Staff Ratio (For a Period of Time)—The average daily membership of pupils in a school system or school, for a given period of time, divided by the number representing the total full-time equivalency of all staff assignments in the school system or school during the same period. (Handbook V, extended)

Pupils Per Acre—The average daily membership of a school divided by the total number of developed and undeveloped acres in the school site. (III) (V)

Quarter Credit Hour—A unit of value, frequently used in higher education, indicating for a course the number of

Glossary—Continued

hours (or equivalency) of instruction per week for a school term of one quarter. A full-time college student making normal progress earns about 45 to 48 quarter credit hours in the academic year, 3 quarters constituting the work of the usual academic year. Quarter credit hours are converted to semester credit hours on the basis of one quarter credit hour equalling two-thirds of a semester credit hour. (Handbook IV, modified)

Reading Level—A level of achievement attained by readers, generally defined in terms of stages of reading development or grade placement of reading books, e.g., the reading-readiness level and the second-grade level.

Record—A collection of information which is prepared by a person, unit, or organization for the use of that same person, unit, or organization. (Handbooks I, II, and III, extended) (IV) (V)

Refresher and Reorientation Training for Professionals—Under P.L. 87–415 as amended, short intensive courses for unemployed or potentially unemployed professional persons who are not seeking to qualify for initial employment in a professional occupation but who need to develop their particular professional skills or a new skill so as to maintain their present employment or qualify for new employment within their professions.

Refugee—An alien who (a) fled from a given nation or area because of persecution or fear of persecution on account of race, religion, or political opinion, (b) cannot return thereto because of fear of such persecution, and (c) is in urgent need of assistance for the essentials of life.

Regular Class—The general type of class in which most pupils receive instruction, including most classes other than those which are composed of exceptional pupils. (V) *See also* ***Special Class for Exceptional Pupils.***

Regular 4-year High School—*See* ***Four-Year High School***, page 60.

Released Time—An arrangement whereby a school officially and regularly excuses one or more full-time pupils or members of the staff for part of a session.

Report—A collection of information which is prepared by a person, unit, or organization for the use of some other person, unit, or organization. (Handbooks I, II, and III, modified) (IV) (V)

Reporting Period—A period of time for which a report is prepared (e.g., a calendar year, school year, regular school term, summer school term, semester, or marking period). (IV) (V)

Reporting Unit—The organizational unit submitting a report (e.g., a State department of education, an intermediate administrative unit, a local basic administrative unit, or a school). (IV) (V)

Residential School for Special Education—A residential school providing a program of special education for exceptional pupils. (V) *See also* ***School for Exceptional Children.***

Resource Center—An instructional space designed, or adapted, as a place for reading, viewing, listening, and otherwise studying about one or more specific subject-matter areas, and for the custody, circulation, production, and administration of related supplies and equipment for the use of the student body and school staff. For inventory purposes, such a space is considered to be a school library instructional space as identified under item X3520.31 on page 98.

Resource Unit—A written plan or collection of materials including, for a given segment of instruction, a variety of learning experiences, resources, and evaluation techniques from which teachers may select those deemed best suited for each pupil or group of pupils.

Scheduling Cycle—The period of time over which a unit of a school schedule extends before it is repeated. Traditional schedules usually have a one-day cycle while in more flexible schedules the cycle may extend for several days or weeks before it is repeated.

School District—A term used synonymously with the term "local basic administrative unit." (II) (III) (IV) (V) *See* ***Local Basic Administrative Unit.***

School for Exceptional Children—A special school composed of children who have been identified by professionally qualified personnel as requiring special educational planning and services. (Handbook III, modified) (V) *See also* ***Exceptional Children.***

School Holiday—A day on which school is not conducted either because of legal provisions or because of designation by the board of education as a holiday. Since such days are not considered as days in session, the pupils are considered as being neither present nor absent on school holidays. (V)

School Month—For school recordkeeping purposes, a period frequently construed to comprise 20 school days, or 4 weeks of 5 days each.

School Plant—The site, buildings, and equipment constituting the physical facilities used by a single school or by two or more schools sharing the use of common facilities. (I) (II) (III) (IV) (V)

School Term—A prescribed span of time when school is open and the pupils are under the guidance and direction of teachers. *See also* ***Regular School Term,*** on page 67, and ***Summer School Term,*** on page 67.

Secondary Instructional Level—The general level of instruction provided for pupils in secondary schools and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (Handbooks IV and V, clarified)

Semester—Half of a regular school term, usually 16 to 18 weeks in duration. (V)

Semester Credit Hour—A unit of value, frequently used in higher education, indicating for a course the number of hours (or equivalency) of instruction per week for a school term of one semester. A full-time college student making normal progress earns about 30 to 32 semester credit hours in the academic year, 2 semesters constituting the work of the usual academic year. (Handbook IV, modified)

Sequence—The order of presentation of aspects of the instructional program, as within a grade, a course, or a series of grades or courses.

Sequential Study—A plan for the logical ordering of the presentation of various aspects of content and learning experiences, whether among a series of schools, among a series of grades or courses, or within a grade or course.

Shared Facilities—Either public school buildings, sites, or equipment regularly used without rental fee by nonpublic school pupils who are under the immediate supervision and control of nonpublic school officials, or nonpublic school buildings, sites, or equipment regularly used without rental fee by public school pupils who are under the immediate supervision and control of public school officials.

Shared Services—An arrangement whereby services provided by one school or school system are made available without charge to another school or school system. To illustrate, the health services or school library services of a given public school might be made available without charge to pupils of a neighboring nonpublic school on a set schedule or as required, with persons providing such services being staff members of the public school, regardless of the location at which the services are provided.

Glossary—Continued

Shared Time—*See* ***Dual Enrollment.***

Sheltered Workshop—An enterprise, usually nonprofit, providing remunerative employment and/or rehabilitative activity under appropriate supervision and direction for workers having one or more handicapping conditions—physical, mental, or emotional—of such degree that normal competitive employment is unsuitable or unavailable.

Skills—Abilities acquired by observation, study, or experience in mental and/or physical performance (e.g., proficiency in planning and investigating, operational techniques, comprehension, organization, execution, remembrance, and application of knowledge to acquire a desired result) basic to the mastery of school work or other activity.

Social Handicap—An abnormality or variation in interpersonal relationships that adversely affects the social adjustment of an individual. (V)

Socially Maladjusted—Individuals having unusual difficulty in interpersonal relationships. (V) *See also* ***Social Handicap.***

Special Class for Exceptional Pupils—A class, composed of exceptional children or of adults identified as exceptional, for whom a program of special education is provided. (Handbook V, clarified) *See also* ***Exceptional Children*** and ***Special Education.***

Special Education—As used in this handbook, educational provisions which are different from or in addition to those provided in the usual school program and are provided for exceptional pupils by specially qualified personnel. Special education may be provided in special classes on a full-time or part-time basis; outside the school plant in the pupil's home, hospital, a sanatorium, or a convalescent home; or in other appropriate settings. (V) *See also* ***Exceptional Pupils*** and ***Exceptional Children.***

Special School—*See* ***School for Exceptional Children.***

Special Youth Project—Under P.L. 87-415 as amended, a project providing guidance, counseling, testing, basic education, basic work skills, social adjustment, occupational training, or other appropriate instruction or services to meet the needs of youths, 16 years of age or older who because of inadequate educational background and work preparation are unable to qualify for and obtain employment without such training or education.

Speech Handicap—Speech which deviates from that spoken by others in any given setting to the extent that it calls attention to itself and interferes with communication. This may include deviations in articulation of speech sounds, in voice production, and/or in rhythm and rate of oral expression. A speech handicap may be a component of a language handicap. (Handbook V, modified) *See also* ***Language Handicap.***

Spiral Curriculum—A plan of curriculum organization by which pupils repeat the study of an aspect of subject matter in two or three different grades (usually nonconsecutive), each time at a higher level of difficulty.

Staggered Sessions—*See* ***Extended-Day Sessions.***

State Vocational Education Plan (State Plan)—A written description of the State's vocational education programs submitted to and approved by the U.S. Commissioner of Education as a condition for the allotment of Federal funds. It sets forth the State's authority under State law for its administration of such programs and includes the policies to be followed by the State in maintaining, extending, and improving existing vocational education programs, and in developing new programs.

Student Body Activities—Cocurricular activities for pupils—such as entertainments, publications, and clubs—that are managed or operated by pupils under the guidance or supervision of staff members (Handbook II and FASA, modified) (Handbook V, edited) *See also* ***Student Organization.***

Student Organization—A group of pupils organized into a single body for the purpose of pursuing common goals and objectives. Such organizations include the various types of clubs and class organizations which, with the approval of appropriate school authorities, are managed and operated by pupils under the guidance or supervision of qualified adults. (FASA, modified) (V) *See also* ***Student Body Activities*** and description of ***Cocurricular Activities*** on pages 47 and 242.

Student Organization, Class or Grade—An organized group of pupils who, by virtue of having completed a designated number of grades or school years, pursue common goals and objectives. Such organizations include the senior, junior, sophomore and freshman classes, and the elementary school grades. They are managed and operated by pupils under the guidance or supervision of appropriate staff members. (FASA, modified) (V)

Student Organization, Club—An organized group of pupils having as its main objective the furtherance of a common interest. Such organizations include social, hobby, instructional, recreational, athletic, honor, dramatic, musical, and similar clubs and societies which, with the approval of appropriate school authorities, are managed and operated by the pupils under the guidance or supervision of qualified adults. (FASA, modified) (V)

Subject—As used in this handbook, an organized body of knowledge which may be more comprehensive than a course but is less comprehensive than a subject-matter area. For example, the subject of American history may be one course or it may be comprised of two courses, such as (a) American history up to the Civil War, and (b) American history from the Civil War to the present.

Subject Matter—A body of facts, understanding, processes, skills, values, and appreciations related to a specific aspect of human activity and experience. Subject matter includes the accumulated knowledge, skills, appreciations, and attitudes comprising the substance of any subject-matter area.

Subject-Matter Area—A grouping of related subjects or units of subject matter under a heading such as English (language arts), foreign languages, art, music, natural sciences, industrial arts, home economics, agriculture, business, physical education, and trades and industrial occupations. (This is a modification of the definition of Content Area, in Handbooks IV and V.)

Summer School—*See* ***Summer School Term,*** page 67.

Supplementary Program—In vocational education, a program offered as supplemental training to persons already employed. *See also* item X 23 00.19 on page 89, and item X 21 43.21 on page 88.

Teacher—A staff member performing assigned professional activities in guiding and directing the learning experiences of pupils in an instructional situation. (Handbooks I and II, modified) (IV) (V)

Teacher Aide—A staff member performing assigned activities of a nonteaching nature which are *not* classified as professional educational, but which assist a staff member to perform professional educational teaching assignments. (IV)

Teacher-Instructional Supervisor Ratio—The total of the full-time equivalencies of all teaching assignments, as of a given date, divided by the total of the full-time equivalencies of all assignments for supervision of instruction as of the same date. (Handbook IV, modified)

Teachers Other Than Classroom Teachers Per 1,000 Pupils in Average Daily Membership—The number representing the total full-time equivalency of teaching assignments less the number representing the total full-time equivalency of classroom teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of pupils during the period. (V)

Teachers Per 1,000 Pupils in Average Daily Membership—The number representing the total full-time equivalency of teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of pupils during this period. (V)

Teaching—The process of helping pupils acquire knowledge, skills, attitudes, and/or appreciations by means of a systematic method of instruction.

Teaching Machine—A device for presenting programmed instruction. *See also* ***Programmed Instruction,*** page 102.

Team Teaching—An organization for classroom instruction which involves two or more teachers who are jointly responsible for planning, instructing, and evaluating a given group of pupils at any instructional level or in a selected subject-matter area or combination of subject-matter areas. A teaching team may or may not include assistants.

Technical High School—*See* ***Vocational and/or Technical High School.***

Technical Institute—An institution, or a division of an institution, offering instruction primarily in one or more of the technologies at the postsecondary instructional level. (Handbook V, modified) *See also* items of information in chapters 5 and 6 under Technical Education, Agriculture, Health Occupations Education, and Office Occupations.

Telecourse—A full sequence of lessons offered over closed-circuit or broadcast television for credit or for auditing purposes. Telecourse instruction may include written work requirements, reading assignments, and/or examinations.

Topic of Instruction—An identifiable segment of a unit of instruction. *See also* ***Unit of Instruction.***

Training—Under P.L. 87–415 as amended, a planned and systematic sequence of instruction under competent supervision designed to impart predetermined skills, knowledge, or abilities with respect to designated occupational objectives; and, in addition to occupational training, may include, to the extent necessary, adult basic education, prevocational training, refresher and reorientation training for professionals, and such direction and supervision as may be required by an agency or institution to conduct the training.

Transcript—An official unabridged and certified record of pupil performance showing all schoolwork completed at a given school and the final mark received in each portion of the instruction. Transcripts often include an explanation of the marking scale used by the school. (Handbook V, clarified)

Tuition—A payment or charge for instruction. (Handbook II modified; Handbook V, modified) *See also* ***Fee.***

Type of Exceptionality—A general type of characteristic by which individuals are identified as being exceptional. (V) *See also* ***Exceptionality.***

Undivided High School—*See* ***Five- or Six-Year High School,*** page 60.

Ungraded Class—A class which is not organized on the basis of grade and has no standard grade designation. This includes regular classes which have no grade designations, special classes for exceptional pupils which have no grade designations, and many adult education classes. Such a class is likely to contain pupils of different ages who, frequently, are identified according to level of performance in one or more areas of instruction rather than according to grade level or age level. Ungraded classes sometimes are referred to as "nongraded." (Handbooks IV and V, extended) *See also* ***Regular Class*** and ***Special Class for Exceptional Pupils.***

Ungraded Elementary School—An elementary school which is not organized on a grade basis, but which offers work on the elementary instructional level. (IV) (V)

Ungraded High School—A secondary school which is not organized on a grade basis, but which offers work on the secondary instructional level. (IV) (V)

Ungraded Primary Unit—An organization, for all or a portion of the primary years of school, which has no grade designations or grade-level standards. *See also* ***Ungraded School.***

Ungraded School—A school which has no grade designations or grade level standards. In such a school pupils are reclassified frequently according to individual progress. Aspects of subject matter taught are designed for the various abilities of individual pupils. Frequently, provision is made for independent study and research by pupils as well as for permissive self-selection of problems and materials. Achievement standards vary with the rate of learning for different pupils and pupil advancement can occur at any time.

Unit of Instruction—A major subdivision of instruction within a course or within an aspect of subject-matter content provided for a self-contained class or for other pupils. Generally composed of several topics, a unit of instruction includes content and learning experiences developed around a central focus such as a limited scope of subject matter, a central problem, one or more related concepts, one or more related skills, or a combination of these.

Upper Elementary Grades—The elementary grades following the intermediate elementary grades, usually grades 7 and 8 in an 8–4 organizational pattern. (IV) (V)

Vehicle—A conveyance used to transport persons or objects, such as automobiles, trucks, buses, station wagons, bookmobiles, wagons, and boats, including trailer-type and other attachments operated from such vehicles. (Handbook III, adapted)

Visual Handicap—An impairment in vision that adversely affects the performance of an individual. A person identified as having a visual handicap may be referred to as "partially seeing" or "blind," according to the nature and severity of his handicap. (V)

Vocational and/or Technical High School—A secondary school which is separately organized and administered under a principal for the primary purpose of offering education and training in one or more semiskilled, skilled, or technical occupations. Departments of other types of high schools which offer courses or programs in areas such as agriculture, home economics, office occupations, and other vocational and/or technical areas are not considered as separately organized vocational or technical high schools. (This is a modification of the definition for Vocational or Trade High School in Handbooks I, II, III, IV, and V.)

Appendix—Acknowledgments

Hundreds of individuals were actively involved in developing the content of this handbook. Almost 200 persons served at national and regional conferences as representatives of the 13 organizations cooperating in all aspects of the handbook project. More than 170 persons served as members of *ad hoc* committees concerned with various subject-matter areas; 53 staff members of the Office of Education served as consultants to these committees. Many other individuals who reviewed handbook materials made their contributions in the form of suggestions channeled through these organizational representatives and committee members. Still others contributed to the handbook in responding to specific questions.

While it obviously would be impossible to list here the name of every individual who made an important contribution to the handbook, special acknowledgment should be made to some, including William C. Strasser, Jr., Research Assistant, U.S. Office of Education, for collecting basic background materials comprising the forms, guides, and manuals of the 50 States and over 200 local school systems; Allan R. Lichtenberger, Chief of the Educational Data Standards Branch, Office of Education, in which the project was conducted; Dr. Norman Key and staff members of the National Commission on Safety Education (NEA) for assistance with the Safety and Driver Education subject area; Col. J. L. Kennedy, Col. W. V. Strait, and other staff members of the Office of the Deputy Assistant Secretary of Defense, Reserve Affairs, for assistance with the Junior ROTC subject area; Gerald M. Van Pool and Colburn E. Hooton of the National Association of Secondary School Principals for assistance with Cocurricular Activities; and the executive officers of the organizations acknowledged on pages vii–viii.

The list which follows is limited to persons participating in the national and regional conferences or on the subject-matter area *ad hoc* committees. Participants in national and regional conferences are listed under the organizations they represented, with conferences identified by designations placed after their names according to the following legend:

(1) Policy Meeting
(2) National Planning Conference
(3) Technical Conference
(4) National Review Conference
(5) Regional Conferences:
    (5a) Atlanta, Ga.
    (5bi) Billings, Mont.
    (5bo) Boston, Mass.
    (5c) Columbus, Ohio
    (5da) Dallas, Tex.
    (5dm) Des Moines, Iowa
    (5sl) Salt Lake City, Utah
    (5sf) San Francisco, Calif.
    (5w) Washington, D.C.
(6) National Completion Conference

The listings of *ad hoc* committees for subject-matter areas include both committee members and Office of Education staff members serving as consultants.

In most instances, individuals are listed according to their titles and locations at the time they participated in the project.

American Association of Junior Colleges

Dr. Edmund J. Gleazer, Jr., Executive Director

Mr. Jesse R. Barnet
Staff Associate
American Association of Junior Colleges
Washington, D.C. (1)

Acknowledgments—Continued

Dr. LeRoy Brown
President, Jefferson State Junior College
Birmingham, Ala. (5a) (6)

Mr. Thomas Edwards
Coahoma Junior College
Clarksdale, Miss. (5da)

Dr. George Erbstein
Dean of Faculty
Montgomery Junior College
Rockville, Md. (4)

Dr. Travis M. McKenzie
President, Virginia Western Community College
Roanoke, Va. (5w)

Dr. David G. Robinson
President, Edison Junior College
Fort Myers, Fla. (5a)

Dr. William G. Shannon
Assistant Executive Director
American Association of Junior Colleges
Washington, D.C. (2)

Mr. Dale E. Traylor, Dean
Roswell Campus
Eastern New Mexico University
Roswell, N. Mex. (5sl)

American Association of School Administrators

Dr. Forrest E. Conner, Executive Secretary

Dr. William J. Ellena, Deputy Executive Secretary

Dr. Evart W. Ardis, Director
Bureau of Appointments
University of Michigan
Ann Arbor, Mich. (2) (4) (6)

Mr. Homer E. DeLong
Superintendent of Schools
Eau Claire, Wisconsin (5dm)

Dr. James P. Harrison
Superintendent, Nether Providence Schools
Wallingford, Pa. (5c)

Mr. James H. Moore
Superintendent of Schools
Riverton, Wyo. (5bi)

Dr. Spencer W. Myers
Superintendent
Edina-Morningside School District
Edina, Minn. (3)

Dr. Archibald B. Shaw
Associate Secretary
American Association of School Administrators
Washington, D.C. (1)

American Personnel and Guidance Association

Dr. Arthur A. Hitchcock, Executive Director, 1954 to 1966

Dr. Willis E. Dugan, Executive Director begining 1966

Mr. James S. Burton
Associate Director of Admissions
Howard University
Washington, D.C. (5w)

Mr. James E. Forsyth
Consultant, Guidance Services
State Department of Public Instruction
Des Moines, Iowa (5dm)

Dr. Robert E. Gorman
Professor of Education
University of Montana
Missoula, Mont. (5bi)

Miss Delphine Hedlund
Vocational Services Supervisor
Contra Costa County Social Service
Martinez, Calif. (5sf)

Dr. Arthur A. Hitchcock
Executive Director
American Personnel and Guidance Association
Washington, D.C. (1)

Mrs. Katherine Hopper
Curriculum Specialist of Guidance
Fairfax County Schools
Fairfax, Va. (4) (6)

Mr. Robert L. Howe
Associate Director
Research and Development Center in Educational Data Processing
State Department of Education
Sacramento, Calif. (3)

Miss Laura Mae Kress
Specialist for Professional Information
American Personnel and Guidance Association
Washington, D.C. (5w)

Mr. George O. McClary
Supervisor of Guidance Services
Richmond Public Schools
Richmond, Va. (2)

Dr. Phelon J. Malouf
Associate Professor
Educational Psychology
University of Utah
Salt Lake City, Utah (5sl)

Dr. Ruby Morris
Assistant Director of Research and Guidance
Dallas Independent School District
Dallas, Tex. (5da)

Dr. Jane S. O'Hern
Associate Professor
Boston University School of Education
Boston, Mass. (5bo)

Dr. Richard C. Rank
Associate Professor
Georgia State College
Atlanta, Ga. (5a)

Mr. Robert E. Wilson
Vice Principal, Lincoln High School
Des Moines, Iowa (5dm)

American Vocational Association, Inc.

Dr. M. D. Mobley, Executive Secretary, 1951 through 1965

Mr. Lowell Burkett, Executive Director beginning 1966

Mr. Lowell A. Burkett
Executive Director
American Vocational Association, Inc.
Washington, D.C. (1)

Mr. F. J. Konecny
Assistant Director
James Connally Technical Institute
Waco, Tex. (5da)

Mr. Alfon D. Mathison
Assistant Director
Instructional Services
Milwaukee Technical College
Milwaukee, Wis. (3) (4) (6)

Acknowledgments—Continued

Dr. Joseph T. Nerden
Professor, School of Education
Department of Industrial Education
North Carolina State College
Raleigh, N.C. (2)

Mr. Lloyd V. Tilt
Dean of Students
Utah Technical College at Salt Lake City
Salt Lake City, Utah (5sl)

Association for Childhood Education International

Miss Alberta L. Meyer, Executive Secretary

Miss Audrianna Allen
Elementary Assistant
Seattle, Wash. (5sf)

Mrs. Frances A. Allen
Primary Consultant
Dallas Independent School District
Dallas, Tex. (5da)

Dr. Thomas A. Burkhart
Principal, Beechwood School
Pittsburgh, Pa. (5c)

Miss Lena M. Foster
President, Massachusetts Association for Childhood Education
Quincy, Mass. (5c)

Dr. Bess Goodykoontz
Formerly Director, International Educational Relations, U.S. Office of Education
Washington, D.C. (2) (4) (6)

Mrs. Madge B. Martin
Elementary School Principal
Oakland, Calif. (5sf)

Miss Alberta L. Meyer
Executive Secretary
Association for Childhood Education International
Washington, D.C. (1)

Mrs. Rebecca S. Payne
Social Studies Specialist
Granite School District
Salt Lake County
Salt Lake City, Utah (5sl)

Mrs. Juanita Potts
Director of Primary Education
Osborn School District #8
Phoenix, Ariz. (5sl)

Association for Supervision and Curriculum Development

Dr. Margaret Gill, Executive Secretary, 1959 to 1965
Dr. Leslee J. Bishop, Executive Secretary, 1965 to 1968
Dr. Fred T. Wilhelms, Executive Secretary beginning 1968

Mrs. Mildred Hoyt Bebell
Professor of Education
Southern Colorado State College
Pueblo, Colo. (2)

Mr. Ernest J. Cherry
Hawaii Curriculum Center
Honolulu, Hawaii (5sf)

Dr. Elizabeth L. Dalton
Professor of Education
University of Chattanooga
Chattanooga, Tenn. (3) (4) (6)

Dr. James J. Jelinek
Professor, Arizona State University
Tempe, Ariz. (5sl)

Dr. Robert R. Leeper
Associate Secretary
Association for Supervision and Curriculum Development
Washington, D.C. (1)

Dr. Margaret McFeaters
Associate Professor of Education and Supervisor of Student Teaching
Slippery Rock State College
Slippery Rock, Pa. (5c)

Dr. John E. Owens
Assistant Superintendent, Instruction
Roslyn Public Schools
Roslyn, N.Y. (5bo)

Mrs. Ruth C. Roberts
Secondary Consultant for Language Arts
Albuquerque Public Schools
Albuquerque, N. Mex. (5sl)

Mrs. Jean Sheldon
Elementary Supervisor
Arlington County Schools
Arlington, Va. (5w)

Mr. Melville F. Warren
Director, Elementary Education
Dover Special School District
Dover, Del. (5w)

Miss Beverly L. White
Supervisor of Instruction
St. James Parish Schools
Lutcher, La. (5da)

Association of Classroom Teachers of the NEA

Miss Margaret Stevenson, Executive Secretary

Mrs. Ruth I. Foster
Secretary, Association of Classroom Teachers, and
Teacher, Des Moines Independent Community School District
Des Moines, Iowa (5dm)

Mrs. Phyllis Hopkins
State President, Association of Classroom Teachers
Teacher, Meadowlark School
Billings, Mont. (5bi) (6)

Mr. William W. Lawson
President-elect, Association of Classroom Teachers of the GEA
Teacher, Cobb County Schools
Acworth, Ga. (5a)

Miss June Parmeley
Resource Teacher
School District of Webster Groves
Webster Groves, Mo. (2)

Mrs. Lucille P. Perrino
Teacher, Atlanta Public Schools
Atlanta, Ga. (5a)

Mrs. Lithangia Robinson
President-elect, Department of Classroom Teachers of the GTEA
Teacher, DeKalb County Schools
Atlanta, Ga. (5a)

Miss Margaret Stevenson
Executive Secretary
Association of Classroom Teachers of the NEA
Washington, D.C. (1)

Acknowledgments—Continued

Council for Exceptional Children

Mr. William C. Geer, Executive Secretary

Dr. William R. Carriker
Professor and Head
Department of Special Education
Pennsylvania State University
University Park, Pa. (3)

Dr. Martin J. Dean
Coordinator, Child Welfare Division
San Francisco City Schools
San Francisco, Calif. (5sf)

Dr. Stella A. Edwards
Director, Division of Special Education
Department of Education
Frankfort, Ky. (5w)

Mr. William C. Geer
Executive Secretary
Council for Exceptional Children
Washington, D.C. (1)

Dr. Helen Jean Hadden
Assistant Professor of Special Education
University of Wyoming
Laramie, Wyo. (5bi)

Dr. Jean R. Hebeler
Coordinator of Special Education
University of Maryland
College Park, Md. (4)

Mrs. Phyllis L. McDonald
Research Associate
Special Education Instructional Materials Center
George Washington University
Washington, D.C. (5w)

Dr. Ruth A Martinson
Coordinator of Teacher Education
California State College
Gardena, Calf. (2)

Mr. Richard Morris
Work-Study Coordinator
Polk County Board of Education
Des Moines, Iowa (5dm)

Mr. Samuel T. Price
Department of Special Education and Rehabilitation
University of Pittsburgh
Pittsburgh, Pa. (5c)

Dr. Monty Sontag
Superintendent, Corpus Christi State School
Corpus Christi, Tex. (5da)

Dr. Godfrey D. Stevens
Department of Special Education and Rehabilitation
University of Pittsburgh
Pittsburgh, Pa. (5c)

Dr. A. C. Tudyman
Director of Special Education
Oakland Unified School District
Oakland, Calif. (5sf)

Dr. Glenn A. Vergason
Chairman, Special Education Department
Georgia State College
Atlanta, Ga. (5a)

Mrs. Grace J. Warfield
Assistant Executive Secretary for Publications
Council for Exceptional Children
Washington, D.C. (5w) (6)

Council of Chief State School Officers

Dr. Edgar Fuller, Executive Secretary, 1948 to 1969
Dr. Don M. Dafoe, Executive Secretary beginning 1969

Dr. James F. Baker
Assistant Commissioner
State Department of Education
Boston, Mass. (5bo)

Mr. Jerry T. Barton
Director, Division of Research
Texas Education Agency
Austin, Tex. (5da)

Dr. Willard Bear
Assistant Superintendent
Instruction, State Department of Education
Salem, Oreg. (2) (4) (5sf) (6)

Mr. Charles L. Bertram
Supervisor of Research
State Department of Education
Richmond, Va. (5w)

Mr. V. Reid Bishop
Deputy State Superintendent Instructional Services
State Department of Education
Boise, Idaho (5sl)

Dr. Harry L. Bowman, Director
Research and Statistical Services
State Department of Education
Atlanta, Ga. (5a)

Mr. Boise L. Bristor
Statistical Analyst
D.C. Public Schools
Washington, D.C. (5w)

Mr. John M. Brown
Director, Statistics
Department of Education
St. Thomas, V.I. (5w)

Mr. Thomas C. Bruce
Coordinator, Title III NDEA
State Department of Education
Columbia, S.C. (5a)

Dr. John E. Cox
Coordinator, Division of Instruction
State Department of Education
Nashville, Tenn. (5a)

Mr. Thomas Culton
Curriculum Coordinator
State Department of Education
Tallahassee, Fla. (5a)

Mr. Thomas W. Dodge
Vermont Director of New England Educational Assessment Project
State Department of Education
Montpelier, Vt. (5bo)

Mr. Henry F. Drewniany
Consultant, Guidance Services
State Department of Education
Hartford, Conn. (5bo)

Mr. E. F. Elson
Assistant Superintendent
Educational Services
Sequoia Union High School District
Redwood City, Calif. (5sf)
(Representing California State Department of Education)

Mr. Harold Farley
Assistant State Superintendent
State Department of Education
Boise, Idaho (5sl)

Miss Afton Forsgren
Coordinator, Secondary Education
State Department of Public Instruction
Salt Lake City, Utah (5sl)

Mr. Stanley L. Fox
Supervisor of Secondary Education
State Department of Education
Columbus, Ohio (5c)

Acknowledgments—Continued

Honorable Richard P. Gousha
Superintendent of Public Instruction
State Department of Public Instruction
Dover, Del. (4)

Mr. Lawrence L. Graham
State Coordinator, MSEIP
State Department of Education
Lincoln, Nebr. (5dm)

Mr. Matthew J. Harris, Jr.
Systems Analyst
State Department of Public Instruction
Harrisburg, Pa. (5c)

Miss R. Christine Hogan
Supervisor of Research (Administration and Statistics)
State Department of Education
Baltimore, Md. (5w)

Dr. James F. Jeffrey
Director, Internal Management
Texas Education Agency
Austin, Tex. (5da)

Dr. Paul H. Johnston
Supervisor of Research
State Department of Public Instruction
Dover, Del. (5w)

Mrs. Jennie W. Kearl
Coordinator of Title III, N.D.E.A., and of Special Projects
State Department of Public Instruction
Salt Lake City, Utah (5sl)

Mr. Tom Kelley
Supervisor of Instruction
State Department of Education
Nashville, Tenn. (5a)

Mr. Robert H. Kidd
State Supervisor of Secondary Education
State Department of Education
Charleston, W. Va. (5c)

Mr. Richard K. Klein
Assistant Superintent of Instruction
State Department of Public Instruction
Bismarck, N. Dak. (5bi)

Mr. Leonard P. Landry
Associate Coordinator of Planning
State Department of Education
Denver, Colorado (5bi)

Mrs. Insook Lee
Coordinator of Federal Programs
State Department of Public Instruction
Helena, Mont. (5bi)

Dr. W. Morrison McCall
Director, Division of Elementary Education
State Department of Education
Montgomery, Ala. (5a)

Mr. David S. Matthews
Coordinator Title X NDEA
State Department of Education
Columbia, S.C. (5a)

Mr. George Mau
Assistant to the Superintendent
State Department of Education
Honolulu, Hawaii (5sf)

Mr. Merlin C. Menagh
Consultant in School Administration
State Department of Education
Lincoln, Nebr. (5dm)

Mr. Derald Merriman
Assistant Director, NDEA, and Foreign Language Supervisor
State Department of Public Instruction
Springfield, Ill. (5dm)

Mr. Earl L. Miller
Director of Supervision
State Department of Public Instruction
Des Moines, Iowa (5dm)

Dr. Norman A. Miller
Assistant Commissioner for Basic Education
State Department of Public Instruction
Harrisburg, Pa. (5c)

Mr. A. Buford Moulton
Director of Data Processing
State Department of Education
Tallahassee, Fla. (5a)

Mr. Roger C. Mowrey
Assistant Superintendent, Administrative Services
Department of Public Instruction
Dover, Del. (5w)

Mr. A. R. Nestoss
Deputy Superintendent of Public Instruction
State Department of Public Instruction
Bismarck, N. Dak. (5bi)

Mr. Juan Manuel Ocasio
Assistant Secretary of Education
Department of Education
Hato Rey, P.R. (5w)

Mr. Lawrence A. Ovian
Senior Supervisor of Secondary Education
State Department of Education
Boston, Mass. (5bo)

Mrs. Roberta C. Palmer
Assistant Director, Department of Mathematics
D.C. Public Schools
Washington, D.C. (5w)

Mr. Hartsel M. Perry
Consultant, Statistical Services and Finance Officer-Title I
State Department of Public Instruction
Des Moines, Iowa (5dm)

Mr. Frederick Peters, Assistant Supervisor
Bureau of Industrial Education
State Department of Education
Sacramento, Calif. (5sf)

Dr. E. Raymond Peterson
Assistant Commissioner of Education
State Department of Education
St. Paul, Minn. (5dm) (6)

Dr. Glenn A. Rich
Director, Division of Elementary and Secondary Education
State Department of Education
Columbus, Ohio (5c)

Honorable Arthur A. Richards
Commissioner of Education
Department of Education
Charlotte Amalie, St. Thomas, V.I. (5w)

Mr. Eugene Robinson
Assistant Director, Division of Elementary and Secondary Education
State Department of Education
Frankfort, Ky. (5c)

Mr. C. Lee Roberts
Coordinator
Accreditation Services
State Department of Education
Tallahassee, Fla. (3)

Mr. Donald E. Russell
Director of Information Systems
State Department of Public Instruction
Madison, Wis. (5dm)

Dr. Allen C. Smith
Associate State Superintendent of Schools
State Department of Education
Atlanta, Ga. (5a)

Acknowledgments—Continued

Mr. James N. Stiltner
Assistant Supervisor, Secondary Education
State Department of Education
Richmond, Va. (5w)

Mr. James F. Watkins
Deputy Superintendent
State Department of Public Instruction
Helena, Mont. (5bi)

Mr. Lewin A. Wheat
Supervisor of High Schools
State Department of Education
Baltimore, Md. (5w)

Mr. Floyd E. Wiegan
Administrator of Supervisory and Consultative Services
State Department of Public Instruction
Madison, Wis. (5dm)

Dr. S. David Winans
Director, Office of Statistical Services
State Department of Education
Trenton, N.J. (5w)

Dr. David W. Zimmerman
Deputy State Superintendent of Schools
State Department of Education
Baltimore, Md. (2)

Department of Elementary School Principals of the NEA

Dr. Robert W. Eaves, Executive Secretary

Mr. Harold Ashman, Principal
Midvale Elementary School
Midvale, Utah (5sl)

Mrs. Freda L. Caviness
Elementary Principal
Indianola Public Schools
Indianola, Iowa (5dm)

Mr. Ross M. Coxe
Associate Executive Secretary
Department of Elementary School Principals
Washington, D.C. (2)

Miss Eula Flagler
Consultant, Elementary Education
Iowa State Education Association
Des Moines, Iowa (5dm)

Dr. Robert W. Langerak
Principal, Smouse Opportunity School
Des Moines, Iowa (5dm)

Mrs. Myrtice N. Larson
Consultant of Primary Education
Arlington Independent School District
Arlington, Tex. (5da)

Mr. Frank A. Nicoll, Principal
Edison Elementary School
Salt Lake City, Utah (5sl)

Mr. Alton L. Reynolds
Principal
Perrin School
Wellesley, Mass. (5bo)

Mr. Lawrence T. Root
Principal, Council Rock School
Brighton Central School District
Rochester, N.Y. (4) (6)

Miss Merle C. Sawyer
Principal, Massachusetts Fields School
Quincy, Mass. (5bo)

Dr. V. Phillips Weaver
Assistant Professor of Education
College of Education
University of Maryland
College Park, Md. (2)

National Association for Public School Adult Education

Mr. Robert A. Luke, Executive Secretary

Mr. Richard R. Gartner
Director, Adult Basic & Civil Defense Adult Education
Texas Education Agency
Austin, Tex. (5da)

Mr. Karl Kessler
Educational Consultant, Adult Education
State Department of Education
Columbus, Ohio (5c)

Mrs. Catherine Kirkland
Coordinator of Adult Education
State Department of Education
Atlanta, Ga. (5a)

Mr. William Koehler
Director of Extension Education
Pittsburgh Public Schools
Pittsburgh, Pa. (4) (6)

Mr. Robert A. Luke
Executive Secretary
National Association for Public School Adult Education
Washington, D.C. (1)

Mr. Robert H. Teichert
Specialist, Adult Education
State Department of Public Instruction
Salt Lake City, Utah (5sl)

Dr. John H. Thatcher (deceased)
Supervisor of Adult Education
State Education Department
Albany, N.Y. (2)

National Association of Secondary School Principals

Dr. Ellsworth Tompkins, Executive Secretary, 1959 to 1968

Dr. Owen B. Kiernan, Executive Secretary beginning 1969

Mr. Bernard U. Bolton (deceased)
Principal, Thomas Jefferson High School
Council Bluffs, Iowa (5dm)

Mr. Samuel M. Graves
Principal, Wellesley Senior High School
Wellesley, Mass. (5bo) (6)

Mr. David A. Mac Nicoll
Assistant Supertendent
Bernardsville School District
Bernardsville, N.J. (5w)

Mr. David W. Meade
Principal, Red Wing High School
Red Wing, Minn. (5dm)

Mr. William Medley
Principal
Lawrence High School
Lawrence, Kans. (5da)

Mr. Arthur L. Mills
Principal
James Madison High School
Dallas, Tex. (5da)

Mr. Harry Salisbury
High School Principal
Valley City, N. Dak. (5bi)

Acknowledgments—Continued

Mr. Robert J. Shultz
Principal, Shortridge High School
Indianapolis, Ind. (5c)

Mr. Robert Sorensen
Educational Consultant
Louis Kingscott and Associates,
Architects and Engineers
Madison, Wis. (4)
(Formerly Director of Secondary Education, Iowa City Community School District, Iowa City, Iowa)

Dr. Norman F. Thorpe
Assistant Dean, Teachers College
University of Nebraska
Lincoln, Nebr. (2)

Dr. Fred T. Wilhelms
Associate Executive Secretary
National Association of Secondary School Principals
Washington, D.C. (1)

National School Boards Association, Inc.

Dr. Harold V. Webb, Executive Director

Dr. Barnard Joy
Former member, NSBA Board of Directors
Arlington, Va. (1) (2)

Mr. R. Winfield Smith, President
National School Boards Association
Pennsburgh, Pa. (4) (6)

Research Division of the National Education Association

Dr. Glen E. Robinson, Director

Mr. Simeon P. Taylor III
Assistant Director
Research Division
National Education Association
Washington, D.C. (2) (4)

Mrs. Jean M. Flanigan
Assistant Director
Research Division
National Education Association
Washington, D.C. (5w)

Dr. William S. Graybeal
Assistant Director
Research Division
National Education Association
Washington, D.C. (5w) (6)

Others Participating in Meetings

Honorable T. H. Bell
Superintendent of Public Instruction
State Department of Public Instruction
Salt Lake City, Utah (5sl)

Dr. Fred K. Bellott
MSEIP Instructional Program Supervisor
State Department of Public Instruction
Des Moines, Iowa (5dm)

Mrs. Jewel J. Bindrup
English Education Specialist
State Department of Public Instruction
Salt Lake City, Utah (5sl)

Mrs. Bonham J. Bolt
Research Assistant, Research Services
State Office Building
Atlanta, Ga. (5a)

Mr. Harold J. Bowers
Deputy Superintendent of Public Instruction
State Department of Education
Columbus, Ohio (5c)

Dr. Francis Colgan
Associate for Program Management
Occupational Education
Rocky Mountain Educational Laboratory
Greeley, Colo. (6)

Mr. Philip A. DiMattia
Supervisor in Education
State Department of Education
Woburn, Mass. (5bo)

Mr. Louis P. Hestres
Chairman, Board of Education of the Virgin Islands
St. Thomas, V. I. (5w)

Dr. L. N. Jensen
Assistant Superintendent, Instruction
State Department of Public Instruction
Des Moines, Iowa (5dm)

Mrs. Afton Dill Nance
Consultant, Elementary Education
State Department of Education
Sacramento, Calif. (5sf)

Dr. Donald W. Robinson
Director of Special Publications
National Association of Secondary School Principals
Washington, D.C. (6)

Mr. W. Earl Sams
Consultant, Secondary Education
State Department of Education
Sacramento, Calif. (5sf)

Mrs. Virginia B. Warren
Director of Publications and Promotion
National Association for Public School Adult Education
Washington, D.C. (4)

Dr. Charles E. Weaver
Supervisor, Guidance Services
State Department of Education
Columbus, Ohio (5c)

Mr. Paul Wills
Director, Administrative Services
State Department of Education
Atlanta, Ga. (5a)

Mr. William B. Wolfe
Chief, School Finance Field Service Section
State Department of Education
Columbus, Ohio (5c)

Mr. Felix J. Zollo, Jr.
Supervisor in Education
State Department of Education
Woburn, Mass. (5bo)

Office of Education

(From Washington, D.C., unless otherwise noted)

Dr. Fred F. Beach
Director
Organization and Administration Branch

Dr. Freeman H. Beets
Regional Assistant Commissioner
Region VI
Kansas City, Mo.

Mr. Duan Bjerke
Program Officer, ESEA
Region VIII
Denver, Colo.

Mr. Ernest N. Brown
Senior Program Officer
Elementary and Secondary Education
Region V
Chicago, Ill.

Acknowledgments—Continued

Dr. Donald C. DeHart
Deputy Regional Assistant Commissioner
Region I
Boston, Mass.

Mr. W. W. Dick
Specialist in Educational Accounting

Dr. E. Glenn Featherston
Deputy Associate Commissioner of Education

Dr. Albert J. Geiger
Deputy Regional Assistant Commissioner
Region IV
Atlanta, Ga.

Mr. Mario F. George
Administrative Officer
Region IX
San Francisco, Calif.

Dr. James E. Gibbs, Jr.
Chief, State School Systems Section

Mrs. Dorothy M. Gilford
Assistant Commissioner
National Center for Educational Statistics

Dr. Yeuell Y. Harris
Specialist, Educational Records and Reports

Dr. Harold Haswell
Director
Educational Research, Region VII
Dallas, Tex.

Mr. Arnold A. Heyl
Director, Division of Data Sources and Standards

Mr. Quentin M. Hill
Specialist, Educational Records and Reports

Mr. Warren A. Hughes
Specialist, Educational Accounting

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch

Dr. Wayne O. Reed
Deputy Commisioner of Education

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Ivan N. Seibert
Educational Program Specialist

Dr. Hyrum M. Smith
Director, Elementary & Secondary Education,
Region VIII
Denver, Colo.

Mr. John Thorslav
Contracting Officer
Region IX
San Francisco, Calif.

Mr. Emanuel Weinstein
Occupations Analyst
Division of Vocational and Technical Education

Ad Hoc Committees

Persons who presided as chairmen during committee conferences are identified by (c). Persons who served as continuing/corresponding chairmen following committee conferences are identified by (cc).

The membership of *ad hoc* committees included no Office of Education personnel. However, selected individuals from the Office of Education—identified by an asterisk (*)—served in advisory/consultative capacities; others who participated are also listed.

AGRICULTURE

Dr. Glenn Z. Stevens (c)
Professor, Department of Agricultural Education
Pennsylvania State University
University Park, Pa.

Mr. Lynwood Bailey (deceased)
Policy and Program Appraisal Division
Agricultural Stabilization and Conservation Service
U.S. Department of Agriculture
Washington, D.C.

Dr. William E. Drake
Assistant Professor
Division of Agricultural Education
Department of Rural Education
College of Agriculture
Cornell University
Ithaca, N.Y.

Mr. James Durkee
Teacher Education, Farm Mechanics
University of Wyoming
Education Building
Laramie, Wyo.

Mr. Harry A. Grant
Director of Agricultural Relations
Wirthmore Feeds, Inc.
Waltham, Mass.

Dr. James W. Hensel (cc)
Agricultural Education Specialist
Center for Vocational and Technical Education
Ohio State University
Columbus, Ohio

Mr. W. D. Kelley
Assistant Superintendent
McCracken County Schools
Court House
Paducah, Ky.

Mr. Leonard E. Kunzman
Executive Secretary
Oregon Farm Bureau Federation
Salem, Oreg.

Dr. M. R. McClung
Head, Animal Industry and Veterinary Science
College of Agriculture
West Virginia University
Morgantown, West Virginia

Dr. Lewis F. Michelson
Associate Professor
Soils and Plant Nutrition
College of Agriculture
University of Massachusetts
Amherst, Mass.

Office of Education

Mr. Harold F. Duis
Senior Program Officer
Program Analysis and Reporting
Division of Vocational and Technical Education

Mr. Neville Hunsicker*
Program Officer, Work Experience and Agricultural Education
Division of Vocational and Technical Education

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

Mr. Edwin L. Rumpf
Chief, Development Branch
Division of Vocational and Technical Education

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Acknowledgments—Continued

Mr. Emanuel Weinstein
Occupations Analyst
Division of Vocational and Technical Education

U.S. Department of Agriculture

Mr. C. B. Gilliland
Assistant to the Administrator
Rural Community Development Services

Mr. James L. Patrick
Rural Community Development Specialist
Farmers Home Administration

ART

Mr. Wendel Heers (c)
Associate Professor of Art Education
College of Architecture and Design
The University of Michigan
Ann Arbor, Mich.

Dr. Michael Andrews
Professor of Art and Education
Syracuse University
Syracuse, N.Y.

Miss Dorothy Dudley
Registrar, Museum of Modern Art
New York, N.Y.

Mrs. Ruth Esserman
Chairman, Art Department
Highland Park High School
Highland Park, Ill.

Dr. Wallace Green
Chairman, Art Department
University of Tampa
Tampa, Fla.

Mr. Robert Haberer (cc)
Director of Instructional Materials
Phoenix Public Schools
Phoenix, Ariz.

Mr. George Keubler
Museum Curator
National Gallery of Art
Washington, D.C.

Mr. Clyde McGeary
Supervisor of Art
State Department of Public Instruction
Harrisburg, Pa.

Office of Education

Dr. Harlan E. Hoffa*
Formerly:
Art Education Specialist
Arts and Humanities Program
Present position:
Chairman, Art Education Department
School of Education
Indiana University
Bloomington, Ind.

Mr. Richard G. Grove*
Formerly:
Museum Education Specialist
Arts and Humanities Program
Present address:
JDR 3rd
50 Rockefeller Plaza
New York City, N. Y.

Mr. Sidney Shtulman
Director, Division of Survey Planning and Analysis
National Center for Educational Statistics

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

BUSINESS

Dr. McKee Fisk (c)
Dean, School of Business and Chairman of Committee on Cooperation with Collegiate Junior Colleges, American Association of Collegiate Schools of Business
Fresno State College
Fresno, Calif.

Mr. Robert Balthaser (cc)
State Supervisor
Business and Office Education
State Department of Education
Columbus, Ohio

Mr. Murray T. Donoho, III
President, Strayer Junior College
Washington, D.C.

Dr. Lloyd V. Douglas
Head, Department of Business and Business Education
University of Northern Iowa
Cedar Falls, Iowa

Mr. Samuel Greer
State Supervisor, Office Occupations
State Department of Education
Columbia, S. C.

Mr. Hollis Guy
Executive Director
National Business Education Association
Washington, D.C.

Dr. Paul S. Lomax
Professor Emeritus and Former Chairman of Business Education
New York University
Maplewood, N. J.

Mr. James McHugh
Program Manager
Information Systems Division
North American Rockwell Corp.
Fullerton, Calif.

Mr. Lawrence A. Walsh
Marketing Manager, Special Education and Training Programs
Gregg Division
McGraw-Hill Book Co.
New York, N.Y.

Office of Education

Dr. Bruce I. Blackstone*
Program Planning Officer and Head, Office Occupations Education
Division of Vocational and Technical Education

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Elmer Schick*
Formerly:
Specialist, Office Occupations
Division of Vocational and Technical Education
(Present address:)
Office of Education/DHEW
Region VII
Dallas, Tex.

Mr. Emanuel Weinstein
Occupations Analyst
Division of Vocational and Technical Education

DISTRIBUTIVE EDUCATION

Dr. Peter G. Haines (c)
Director, Research and Development Program in Vocational and Technical Education
Michigan State University
East Lansing, Mich.

Acknowledgments—Continued

Mr. Harry A. Applegate (cc)
Executive Director
Distributive Education Clubs of America
Washington, D.C.

Mr. T. Carl Brown
State Supervisor
Distributive Education
Department of Public Instruction
Raleigh, N.C.

Mr. Charles J. Christianson
Assistant Director
Wausau Technical Institute
Wausau, Wis.

Dr. Guy G. Gordon
Chairman, Department of Marketing, Transportation, and International Business
Graduate School of Business Administration
University of Washington
Seattle, Wash.

Mr. Paul J. Hartman
County Supervisor of Distributive Education
Arlington County Public Schools
Arlington, Va.

Dr. Hans E. Krusa
Professor of Retail Management
Institute of Retail Management
New York University
New York, N.Y.

Mr. Wendell Metcalf, PMED
Small Business Administration
Washington, D.C.

Mr. A. Todd Sagraves
Past President, National Association of Distributive Education Teachers
Central Connecticut State College
New Britain, Conn.

Mr. Edward S. Scannell
Coordinator of Executive Programs
Bureau of Research and Services
College of Business Administration
Arizona State University
Tempe, Ariz.

Mr. Philip W. Schindel
Executive Director
Variety Stores Association, Inc.
New York, N. Y.

Mr. L. T. White (deceased)
Consultant to Business Owners
Washington, D.C.

Office of Education

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

Miss Mary V. Marks*
Program Officer, Distributive Education
Division of Vocational and Technical Education

Mr. Edwin L. Nelson*
Senior Program Officer
Work Experience Programs
Division of Vocational and Technical Education

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Emanuel Weinstein
Occupations Analyst
Division of Vocational and Technical Education

ENGLISH LANGUAGE ARTS

Dr. W. Nelson Francis (c)
Professor of Linguistics and English
Box E., Brown University
Providence, R.I.

Mr. Fred Carpenter (cc)
Supervisor of English
Arlington County Public Schools
Arlington, Va.

Dr. Frederic G. Cassidy
Professor, Department of English
University of Wisconsin
Madison, Wis.

Dr. Verda Evans
Supervisor of English and Language Arts
Cleveland Public Schools
Cleveland, Ohio

Dr. Eldonna L. Everetts
Assistant Executive Secretary
National Council of Teachers of English
Champaign, Ill.

Dr. H. A. Gleason
Professor of Linguistics
Hartford Seminary Foundation
Hartford, Conn.

Dr. Ruth Strickland
Research Professor of Education
School of Education
Indiana University
Bloomington, Ind.

Dr. Samuel Weingarten
Professor, Department of English
Chicago City Junior College
Chicago, Ill.

Dr. William Work
Executive Secretary
Speech Association of America
Statler-Hilton Hotel
New York, N.Y.

Office of Education

Dr. Sue M. Brett*
Research Associate
Instructional Materials and Practices Branch
Division of Comprehensive and Vocational Research

Dr. Julia M. Haven*
Senior Program Specialist in English and Reading
Follow Through Branch
Division of Compensatory Education

Dr. Arno M. Jewett*
Policies and Procedures
Division of Plans and Supplementary Centers

Dr. Donald R. Tuttle*
Educational Program Specialist
Basic Studies Branch
Division of College Programs

FOREIGN LANGUAGES

Mr. George Constantou
Chairman, Foreign Languages Department
Cleveland Hill High School
Cheektowaga, N.Y.

Mrs. Ruth Craig (cc)
Head, Department of Foreign Language
Santa Rosa Junior College
Santa Rosa, Calif.

Mrs. Guillermo del Olmo
No. 12 Pond Hill Road
Morris Township, N.J.

Acknowledgments—Continued

Mr. Lester W. McKim
Director of Foreign Languages
Belleview Public Schools
Belleview, Wash.

Mrs. Kenneth Mildenberger
37 West 12th Street
New York, N.Y.

Dr. George [illegible] Smith
Houghton, Mifflin Co.
Boston, Mass.

Mr. Glen D. Willbern
Modern Language Association of America
New York, N.Y.

Office of Education

Miss Ester M. Eaton* (c)
Formerly:
Program Specialist, Modern Language Institutes Section
Division of Educational Personnel Training
Present address:
726 Mendoza Avenue
Coral Gables, Fla.

Miss Mary E. Hayes*
Formerly:
Specialist for Foreign Languages
Curriculum and Instruction Branch
Division of Educational Personnel Training
Present address:
44 Lennox Avenue
Albany, N.Y.

HEALTH OCCUPATIONS EDUCATION

Dr. Ben F. Miller, III (c) (cc)
Secretary-Treasurer
American Association of Dental Schools
Chicago, Ill.

Dr. Albert M. Ammerman
President, Suffolk County Community College
Selden, Long Island, N.Y.

Mrs. Lucile Broadwell
Director, Vocational Education for Girls
Chicago Public Schools
Chicago, Ill.

Mrs. Helen G. Burzynski
Department Chairman
Technical Community College
Springfield, Mass.

Dr. Edward W. Hawthorne
Professor, and Head, Department of Physiology and Associate Dean, College of Medicine
Howard University
Washington, D.C.

Mr. William H. Lentz, Jr.
Pennsylvania Academy of General Practice
Harrisburg, Pa.

Miss Eleanor E. McGuire
Assistant Director for Education
Connecticut Regional Medical Program
New Haven, Conn.

Dr. George F. Stevenson
Professor of Clinical Pathology and Director of the Department of Medical Technology
Medical School of South Carolina
Charleston, S.C.

Dr. A. Nicholas Taylor
Dean of School of Related Health Sciences
Chicago Medical School
Chicago, Ill.

Mr. William J. Van Cleve
Director, Division of Personnel Services
American Hospital Association
Chicago, Ill.

Mr. Edward W. Weimer
Administrator, Manpower for Health Project
American Hospital Association
Chicago, Ill.

Office of Education

Mr. Arnold A. Heyl
Director, Division of Data Sources and Standards
National Center for Educational Statistics

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

Miss Helen K. Powers*
Program Officer, Secondary-Post-Secondary and Health Occupations Education
Division of Vocational and Technical Education

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mrs. Orieanna Syphax*
Chief, National Programs and Services Branch
Division of Manpower Development and Training

HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION

Dr. Ben W. Miller (c) (cc)
Professor of Physical Education
Department of Physical Education
University of California
Los Angeles, Calif.

Dr. Bernard Dolat
Consultant, Health and Physical Education
State Department of Education
Hartford, Conn.

Dr. A. E. Florio
Professor, Safety Education and Program Director of Safety and Driver Education
University of Illinois
Urbana, Ill.

Miss Barbara Hawkins
Supervisor of Health and Physical Education
Board of Education
Chicago Public Schools
Chicago, Ill.

Miss Patricia Hill
Consultant in Health Education
State Department of Education
Sacramento, Calif.

Dr. Harold M. Hobart, M.D.
5402 Connecticut Avenue, NW.
Washington, D.C.

Dr. Edwin J. Staley
Executive Director
Recreation and Youth Services
Planning Council
Los Angeles, Calif.

Dr. Wallace Wesley
Assistant Director
Department of Health Education
American Medical Association
Chicago, Ill.

Office of Education

Miss Elsa Schneider*
Comprehensive Program Manager for Health-Related Activities
Division of State Agency Cooperation

HOME ECONOMICS

Dr. Anne G. Buis
Head, Home Economics Teacher Education
School of Home Economics
Florida State University
Tallahassee, Fla.

Acknowledgments—Continued

Miss C. Aileen Ericksen
Specialist, Home Economics Education
State Department of Public Instruction
Salt Lake City, Utah

Dr. Pauline G. Garrett (cc)
Formerly:
Associate Professor
Home Economics Education
University of Missouri
Columbia, Mo.
Present position:
Program Officer, Home Economics Education
Adult, Vocational, and Library Programs
Office of Education/DHEW
Region VIII
Denver, Colo.

Miss Jerline Kennedy
Consultant, Home and Family Life Education
Dallas Public Schools
Dallas, Tex.

Miss Evelyn Miller
State Supervisor, Home Economics Education
State Department of Education
Baltimore, Md.

Miss Ruthanna Russel
Formerly:
Home Economics Editor
Houghton Mifflin Co.
Boston, Mass.
Present position:
American Home Economics Association
Washington, D.C.

Miss Mary Bell Vaughan
Assistant State Director
Home Economics Education
State Department of Education
Frankfort, Ky.

Office of Education

Dr. Margaret M. Alexander* (c)
Program Officer
Teacher Education, Home Economics
Division of Vocational and Technical Education

Dr. Berenice Mallory*
Senior Program Officer
Secondary-Postsecondary Programs
Division of Vocational and Technical Education

INDUSTRIAL ARTS

Dr. Ralph Bohn
Head, Department of Industrial Arts
San Jose State College
San Jose, Calif.

Mr. Wesley L. Face
Associate Professor of Industrial Education
Stout State University
Menomonie, Wis.

Miss Elizabeth Hunt
Supervisor of Industrial Arts K–6
State Department of Education
Trenton, N.J.

Dr. G. Wesley Ketcham
Consultant in Industrial Arts
State Department of Education
Hartford, Conn.

Dr. John Mitchell
Chairman, Industrial Arts Department
Gorham State Teachers College
Gorham, Maine

Dr. Ralph V. Steeb (cc)
Consultant in Industrial Arts
State Department of Education
Tallahassee, Fla.

Dr. Robert L. Woodward
Consultant in Industrial Arts Education
State Department of Education
Sacramento, Calif.

Office of Education

Mr. Albert L. Pelley*
Education Program Specialist
Basic Studies Branch
Division of Higher Education

Dr. Marshall L. Schmitt* (c)
Chief, Development Program Section
Plans and Supplementary Centers

MATHEMATICS

Dr. William Duren
Professor of Mathematics
Department of Mathematics
University of Virginia
Charlottesville, Va.

Mr. Elden B. Egbers
Supervisor, Mathematics Program
State Board of Education
Olympia, Wash.

Professor Frank Fitzgerald
School of Education
Boston University
Boston, Mass.

Mr. William J. Gerardi
Supervisor of Mathematics
Baltimore City Schools
Baltimore, Md.

Miss Alice Hach
Supervisor of Mathematics
Ann Arbor Public Schools
Ann Arbor, Mich.

Mrs. Alice Hart
Associate Professor of Mathematics
University of Illinois at Chicago Circle
Chicago, Ill.

Mr. Lawrence Hawkinson
Curriculum Associate
Department of Mathematics
Henry M. Gunn Senior High School
Palo Alto, Calif.

Mrs. Gladys Thomason
Coordinator of Mathematics Education
State Department of Education
Atlanta, Ga.

Office of Education

Dr. Kenneth Brown*
Acting Chief, Career Opportunity Branch
Division of School Programs

Dr. Edwina Deans*
Education Specialist
Division of Plans and Supplementary Centers

Miss Veryl Schult* (c) (cc)
Research Associate
Instructional Materials and Practices Branch
Division of Elementary and Secondary Education Research

Dr. Lauren G. Woodby*
Formerly:
Specialist for Mathematics
Curriculum and Instruction Branch
Division of Elementary and Secondary Education Research
Present position:
Professor of Mathematics
Department of Mathematics
Michigan State University
East Lansing, Mich.

MUSIC

Dr. Robert H. Klotman (c)
Director of Music Education
Detroit Public Schools
Detroit, Mich.

Professor Peter Bergquist
School of Music
University of Oregon
Eugene, Oreg.

Miss Florence Booker
Supervisor of Vocal Music and Director, Washington-Lee High School Choir
Arlington County Public Schools
Arlington, Va.

Professor Barry Brook
Department of Music
Queens College
Flushing, Long Island, N.Y.

Dr. James W. Dunlop
Professor of Music Education and Conductor of University Band
Pennsylvania State University
University Park, Pa.

Dr. Charles R. Hoffer (cc)
Associate Professor of Music
School of Music
Indiana University
Bloomington, Ind.

Mr. Lyle A. Hopkins
Chairman, Music Department
Thornton Township High School and Junior College
Harvey, Ill.

Professor Joel Newman
Department of Music
Columbia University
New York, N.Y.

Mr. Emmett R. Sarig
Director of Extension
Music Department
University of Wisconsin
Madison, Wis.

Dr. Gladys G. Tipton
Professor of Music Education
Teachers College
Columbia University
New York, N.Y.

Office of Education

Dr. Harold W. Arberg*
Director, Arts and Humanities Program
Bureau of Research

NATURAL SCIENCES

Mr. Robert D. Binger (c) (deceased)
Supervisor of Science
Leon County Schools
Tallahassee, Fla.

Miss Patricia Blosser
Science Teacher
Byron Junior High School
Shaker Heights, Ohio

Dr. Jack L. Carter
Biological Sciences Curriculum Study
Post Office Box 930
Boulder, Colo.

Dr. Ruth Cornell
Supervisor, Science
Wilmington Public Schools
Wilmington, Del.

Dr. Marjorie H. Gardner (cc)
Associate Professor
Chemistry and Secondary Education
Science Teaching Center
University of Maryland
College Park, Md.

Dr. Claude L. Gates, Jr.
Dean of Student Affairs
York Junior College
York, Pa.

Mr. Richard Schulz
Supervisor of Science and Mathematics
Cedar Rapids Public Schools
Cedar Rapids, Iowa

Office of Education

Dr. Paul E. Blackwood*
Chief, Southeast Program Operations Branch
Division of State Agency Cooperation

Dr. Clarence B. Lindquist*
Regional Coordinator
Graduate Academic Programs Branch
Division of Graduate Programs

OFFICE OCCUPATIONS

(The committee listed under BUSINESS served also for OFFICE OCCUPATIONS.)

SOCIAL SCIENCES/SOCIAL STUDIES

Dr. Jonathon McLendon (c) (cc)
Professor and Chairman
Department of Social Science Education
College of Education
University of Georgia
Athens, Ga.

Dr. Jack Allen
Professor and Chairman
Department of History and Government
George Peabody College
Nashville, Tenn.

Dr. Phillip Bacon
Professor of Geography
University of Washington
Seattle, Wash.

Mr. Walter E. Beach
Staff Associate Director
American Political Science Association
Washington, D.C.

Miss Eunice Johns
Supervisor, Social Studies
Wilmington Public Schools
Wilmington, Del.

Dr. John Maher
Senior Economist
Joint Council on Economic Education
New York, N.Y.

Miss Mildred McChesney
Supervisor, Social Studies
State Education Department
Albany, N.Y.

Dr. John U. Michaelis
Professor of Education
University of California
Berkeley, Calif.

Dr. Roy A. Price
Professor of Social Science and Education
Syracuse University
Syracuse, N.Y.

Dr. David F. Trask
Professor of History
The State University of New York
Stonybrook, N.Y.

Acknowledgments—Continued

Office of Education

Mr. Howard H. Cummings*
Coordinator of Research Programs
Division of Elementary and Secondary Education Research

Mr. Charles Foster*
Education Program Specialist
Basic Studies Branch
Division of College Programs

Dr. Wilhelmina Hill*
Coordinator for Environmental Education

Dr. Allen A. Schmieder*
Assistant Director
Division of College Programs
Educational Personnel Development

TECHNICAL EDUCATION

Mr. Jerry S. Dobrovolny (c) (cc)
Professor and Head of General Engineering
University of Illinois
Urbana, Ill.

Mr. Charles O. Whitehead (c)
Director, State Technical Institute at Memphis
Memphis, Tenn.

Mr. Donald M. Brill
Research and Coordinating Unit
Wisconsin State Board for Vocational Education
Madison, Wis.

Dr. Lewis R. Fibel
Specialist in Occupations Education
American Association of Junior Colleges
Washington, D.C.

Mr. Kenneth K. Menefee
Technical Support Supervisor
Particle Accelerator Division
Argonne National Laboratory
Chicago, Ill.

Mr. Thomas V. Raimondi
Director, Hartford State Technical Institute
Hartford, Conn.

Mr. Robert S. Tiemann
Vocational and Technical Education Officer
Education Programs Division
National Aeronautics and Space Administration
Washington, D.C.

Mr. Milo E. Van Hall
Dean, State University of New York
Agricultural and Technical College
Alfred, N.Y.

Mr. Royson N. Whipple
President, State University, Agricultural and Technical College
Morrisville, N.Y.

Mr. Frank H. Wimer
State Director, Trade, Industrial, and Technical Education
Post Office Box 250
Olympia, Wash.

Office of Education

Dr. Walter J. Brooking*
Senior Program Officer
Secondary-Postsecondary Programs
Division of Vocational and Technical Education

Mr. Alexander C. Ducat*
Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Samuel Geek*
Office of Education/DHEW
Region III
Charlottesville, Va.

Dr. Robert M. Knoebel*
Formerly:
Acting Assistant Director
State Program Services Branch
Division of Vocational and Technical Education
Present position:
Acting Director
Bureau of Community Colleges
Department of Public Instruction
Harrisburg, Pa.

Mr. Allan R. Lichtenberger
Chief, Educational Data Standards Branch
National Center for Educational Statistics

Mr. George Sanders
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Emanuel Weinstein
Occupations Analyst
Division of Vocational and Technical Education

TRADE AND INDUSTRIAL OCCUPATIONS

Mr. Richard S. Nelson (c)
Chief, Industrial Education
State Department of Education
Sacramento, Calif.

Mr. Elmer C. Betz
Principal, Des Moines Technical High School
Des Moines, Iowa

Mr. S. T. Brantner
Associate Professor
Industrial Education
Pennsylvannia State College
State College, Pa.

Mr. Johnny W. Browne (cc)
Program Officer
Vocational-Technical Education
Office of Education/DHEW
Region IV
Atlanta, Ga.

Mr. Jerry S. Dobrovolny
Professor and Head of General Engineering
University of Illinois
Urbana, Ill.

Mr. Fred Irwin
Formerly:
Assistant to the President
Electrical Workers, AFL-CIO
Washington, D.C.
Presently:
Retired

Dr. C. Thomas Olivo
Department of Industrial Education
College of Education
Temple University
Philadelphia, Pa.

Mr. Alfred A. Redding
Assistant State Director for Vocational Education
Office of the Superintendent of Public Instruction
Springfield, Ill.

Mr. George Rietz
Consultant, Education Relations
General Electric Company
Crotonville-Ossining, N.Y.

Mr. C. O. Tower
Supervisor of Research and Survey Services
Division of Vocational Education
State Department of Education
Columbus, Ohio

Mr. Ivan E. Valentine
Center for Vocational and Technical Education
The Ohio State University
Columbus, Ohio

Acknowledgments—Continued

Office of Education

Mr. Earl M. Bowler*
Senior Program Officer
Adult Vocational Technical Programs
Division of Vocational and Technical Education

Mr. George Sanders*
Senior Program Officer
Facilities and Equipment Programs
Division of Vocational and Technical Education

Mr. Emanuel Weinstein*
Occupations Analyst
Division of Vocational and Technical Education

GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION

Dr. Leslee J. Bishop
Formerly:
Executive Secretary
Association for Supervision and Curriculum Development
Washington, D.C.
Present position:
Professor of Education
University of Georgia
Athens, Ga.

Mr. W. Theodore Boston
Assistant Superintendent
Certification and Accreditation
State Department of Education
Baltimore, Md.

Dr. Robert W. Eaves
Executive Secretary
Department of Elementary School Principals of the NEA
Washington, D.C.

Mrs. Betty Fogg
Educational Consultant
Office of Economic Opportunity
Washington, D.C.

Dr. Bess Goodykoontz
Association for Childhood Education International
Washington, D.C.

Dr. Robert Gilstrap
Executive Secretary
Department of Elementary, Kindergarten, and Nursery Education of the NEA
Washington, D.C.

Miss Gertrude L. Hoffman
Specialist, Day Care Services
Early Childhood Division
Children's Bureau
Department of Health, Education, and Welfare
Washington D. C.

Mr. Douglas W. Hunt
Director, Administrative Services
National Association of Secondary-School Principals
Washington, D.C.

Reverend William L. Kelly
Director, Educational and Psychological Services Bureau
Georgetown University
Washington, D.C.

Miss M. Eleanor Rice
Supervisor, Certification
State Department of Education
Baltimore, Md.

Dr. Robert J. Shockley
Assistant Superintendent for Elementary Schools
Prince Georges County
Upper Marlboro, Md.

Mr. William E. Stiles
Formerly:
Assistant Executive Secretary
Association of Classroom Teachers of the NEA
Washington, D.C.
Present position:
Negotiation Specialist
Division of Field Services
National Education Association
Washington, D.C.

Dr. Austin Van Der Slice
Chairman, Department of Sociology
American University
Washington, D.C.

Office of Education

Dr. Minnie P. Berson*
Education Specialist
Bureau of Education for the Handicapped

Dr. Jane H. Franseth*
Education Program Specialist
Division of State Agency Cooperation

Dr. Richard J. Keating*
Formerly:
Specialist for Secondary School Administration
Division of State Agency Cooperation
Present position:
Chief, Division of Instructional Services
Bureau of Indian Affairs
Department of the Interior

Miss Rose E. Koury*
Education Program Specialist
Division of State Agency Cooperation

Dr. Ovid T. Parody*
Formerly:
Chief, Instructional Section
Division of State Agency Cooperation
Present position:
Professor of Educational Administration
School of Education
University of Massachusetts
Amherst, Mass.

DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS

Dr. Frances P. Conner (c) (cc)
Chairman, Department of Special Education
Teachers College
Columbia University
New York, N.Y.

Dr. Samuel C. Ashcroft
Chairman, Special Education Department
George Peabody College for Teachers
Nashville, Tenn.

Dr. Ralph L. Hoag
Superintendent, Rochester School for the Deaf
Rochester, N.Y.

Dr. Peter Knoblock
Assistant Professor
Division of Special Education and Rehabilitation
Syracuse University
Syracuse, N.Y.

Mr. John Melcher
Director, Bureau for Handicapped Children and Assistant State Superintendent
State Department of Public Instruction
Madison, Wis.

Mrs. Ferne K. Root
Project Associate
Regional Special Education Instructional Materials Center
Hunter College
New York, N.Y.

Dr. Ralph F. Simches
Chief, Bureau for Handicapped Children
State Education Department
Albany, N.Y.

Mr. Frank B. Wilson
Director, Speech Pathology
Jewish Hospital of St. Louis
St. Louis, Mo.

(Dr. Michael E. Freelund, Director, Childhood Mental Illness Service, National Association for Mental Health, New York, N.Y., also participated in the *ad hoc* committee conference.)

Office of Education

Dr. James C. Chalfant*
Formerly:
Acting Section Chief
Handicapped Children and Youth
Present position:
Department of Special Education
University of Illinois

Dr. Morvin A. Wirtz*
Formerly:
Deputy Assistant Commissioner
Office of Disadvantaged and Handicapped
Present position:
Chairman, Department of Special Education
Western Michigan Universtiy
Kalamazoo, Michigan

Index

A

- Abilities, 55, 103
- Ability
  - leadership, 52, 89
  - level of, 48, 65
  - required, 48, 56, 65
- Academic cocurricular activities, 146, 243
- Accelerated promotion, 38, 84
- Acceleration, 257
- Accessories, apparel, and, 117, 170
- Accidents, traffic, 148, 207
- Accomplishment unit, 35, 78
- Accountants, 134, 214
- Accounting
  - advanced, 111, 161
  - and computing occupations, 134, 213
  - attendance, 28, 96
  - Business, 111, 160
  - cost, 111, 161
  - data processing, 111, 162
  - Distributive Education, 119, 176
  - governmental and institutional, 111, 162
  - intermediate, 111, 162
  - managerial, 111, 162
  - payroll, 111, 162
  - principles, 111, 161
  - secretarial, 111, 162
  - systems, 111, 161
  - tax, 111, 162
- Accounts, farm, 108, 155
- Accreditation
  - criteria, 25, 74
  - definition, 65
  - denied, 31, 66
  - not available, 31, 66
  - not requested, 31, 66
  - of program of studies, 43, 65
  - of school, 30, 65
- Accredited, 31, 66
- Accrediting
  - agency, 31, 66
  - association, regional, 31, 66
- Acculturation, 89, 136, 218
- Achievement, 38, 84
  - in schoolwork, 37, 83
  - unsatisfactory, 38, 86
- Acting, 122, 182
- Action, military organization in, 151, 254
- Activities
  - academic cocurricular, 146, 243
  - athletic and sport cocurricular, 147, 244
  - cocurricular, *see* Cocurricular activities
  - dramatic, 126, 192
  - extraclass, *see* Cocurricular activities
  - music cocurricular, 147, 244
  - noncourse, *see* Cocurricular activities
  - outdoor recreational, 126, 192
  - personal responsibilities in unsupervised, 125, 190
  - school and/or public service cocurricular, 147, 245
  - social cocurricular, 148, 246
  - student body, 266
- Activity
  - and/or assembly period, 32, 69
  - cocurricular, *see* Cocurricular activity
  - group study, 47, 94
- Activity—Continued
  - intraschool, 50, 83
  - interschool, 50, 83
  - manipulative and tactile, 54, 102
- Adapted physical education, 125, 191
- Adapting handbook to local records and reports systems, 5
- Adeptness, social, 52, 90
- Adequacy
  - numerical, of administrative staff of school, 34, 76
  - of staffing, 25, 75
- Adjusting programs to health needs of individual pupils 40, 92
- Administering psychological tests, 40, 93
- Administration, 25, 76
  - central, 22, 63
  - organization for, 26, 76
- Administrative
  - activity, 24, 73
  - assistants, 136, 217
  - staff, *see* Staff, administrative
- Administrative Unit, 257
  - intermediate, 25, 73
  - local basic, 262
- Adult, 257
  - age, 44, 81
  - basic education, 258
  - education, *see* Adult education
  - school, 258
- Adult education, 257
  - organizational arrangement, 30, 61
  - program, 257
- Advanced accounting, 111, 161
- Advanced placement course, 48, 62
- Advancement, 51, 86
- Adventures in science, 150, 251
- Advertising
  - and graphic design, 110, 159
  - and sales promotion
    - Business, 111, 160
    - Distributive Education, 117, 170
  - campaigns, 112, 162
  - copywriting
    - Business, 112, 162
    - Distributive Education, 118, 174
  - direct mail
    - Business, 112, 162
    - Distributive Education, 119, 174
  - layout, 118, 174
  - media, 118, 174
  - media and campaigns, 112, 162
  - principles
    - Business, 112, 162
    - Distributive Education, 118, 174
  - production, 119, 174
  - retail, 119, 174
  - services, 117, 170
- Advisory committee, 24, 73
- Aeronautical technology, 140, 224
- Aeronautics, 134, 212
- Aerospace
  - and the American people, 151, 252
  - industry and research, 151, 253
  - leadership, 151, 253
  - leadership application, 151, 253
  - military, 151, 253
  - opportunities for the individual, 151, 253

284/

Affairs, contemporary world, 139, 222
Africa, 137, 219
After school activities for pupils, 41, 96
Age, 37, 46, 55, 83, 85, 103
  adult, 44, 81
  chronological, 38, 84
  prekindergarten, 44, 81
  the coming of the aerospace, 151, 252
Agency
  accrediting, 31, 66
  approving, 23, 66
Ages
  span of compulsory attendance, 22, 64
  span of permissive attendance, 23, 64
Agricultural
  chemicals, 108, 156
  construction and maintenance, 109, 156
  electrification, 109, 156
  electrification technology, 140, 224
  machinery and equipment technology, 140, 224
  marketing, 118, 172
  mechanics, 109, 156
  mechanics skills, 109, 156
  power and machinery, 109, 156
  production, 107, 154
  products, 109, 157
  related technology, 140, 226
  resources (conservation, utilization, and services), 109, 158
  structures and conveniences
Agriculture, 109, 156
    Technical Education, 140, 223
  supplies and services, 108, 156
  technology, 140, 224
Agriculture, 107, 153
Aid, first, 124, 189
Aide
  community health, 124, 188
  home health, 123, 186
  mental retardation, 124, 187
  nursing assistance, 123, 186
  psychiatric, 123, 186
  school health, 123, 186
  teacher, 266
Aims
  and objectives, 26, 78
  and objectives of the school, 33, 71
  of the school system, 33, 71
Air, 109, 158
Air conditioning, 141, 229
  cooling, 141, 229
  heating, 142, 229
  ventilating (filtering and humidification), 142, 229
Aircraft
  maintenance, 142, 229
  of today, 151, 252
  operations, 142, 230
  propulsion systems for, 151, 253
Air Force
  community, the, 151, 252
  Junior ROTC, 150, 252
  traditions, customs, and flight drill, 151, 252
Air frame, 142, 229
Air navigation, 151, 253
Alcohol, drugs, other harmful substances, and driving, 148, 247
Algebra, 130, 201
  and statistics, 130, 201
  and trigonometry, 130, 202
  college, 130, 202
  intermediate, 130, 202
  linear, 130, 202
Alphabet (ITA)
  initial teaching, 120, 178
America
  Boy Scouts of, 148, 246
  Distributive Education Clubs of, 146, 243
  Future Business Leaders of, 146, 243
  Future Farmers of, 146, 243
  Future Homemakers of, 146, 243
America—Continued
  Future Teachers of, (NEA), 146, 243
  Vocational Industrial Clubs of, 147, 244
American
  government, 139, 222
  Indians, 136, 218
  Latin, 137, 219
  literature, 120, 179
  military history, 149, 250
Analysis
  budgeting and, 108, 155
  comparative, 54, 101
  introduction to, 131, 207
  map and terrain, 149, 250
  market, 118, 174
  qualitative, 133, 211
  quantitative, 133, 211
Analysts
  budget management, 136, 217
  data-methods and systems-procedures, 136, 217
  systems, 135, 215
Analytic geometry, 131, 206
Anatomy, 132, 210
Animal
  health, 107, 154
  science
    Agriculture, 107, 154
    Technical Education, 140, 226
Annually, 56, 70
Anthropology, 132, 136, 210, 218
  cultural (social), 136, 210
  physical, 137, 218
Apparel and accessories, 117, 170
Appliance repair, 142, 229
Appliances
  electrical, 142, 229
  gas, 142, 229
Application, 51, 88
  aerospace leadership, 151, 254
  in process, 31, 66
Applications, technological, 133, 134, 210, 212, 213
Applied
  mathematics, 130, 202
  research, 28, 95
Appraisal
  health, 40, 92
  real estate
    Business, 115, 167
    Distributive Education, 119, 175
Appreciations and attitudes, 51, 89
Apprentice, 258
Apprenticeship
  program, 46, 88
  training, 258
Appropriate behavior, 51, 89
Approval
  and/or accreditation, 65–66
  and/or accreditation criteria, 25, 74
  application in process, 23, 66
  definition, 65
  denied, 23, 66
  not available, 23, 66
  not requested, 23, 66
  of course, 48, 65
  of program of studies, 43, 65
  of school, 30, 65
  of school system, 23, 65
  status, 23, 43, 49, 66
Approved, 23, 66
Approving agency, 23, 31, 43, 49, 66
Aptitude, scholastic, 24, 72
Aquatics, 125, 191
Arboriculture, 109, 157
Archeology, 136, 218
Archery, 147, 244
Architectural
  design, 110, 160
  drafting, 128, 196
  technology, 140, 224

- Architecture, landscape, 110, 160
- Area
  - general development in, 51, 89
  - introduction to, 51, 88
  - introduction to research methods in, 51, 88
  - knowledge and understanding in, 51, 89
  - of specialization, 42, 103
  - school, 30, 61
  - skills associated with, 52, 90
  - studies (multidisciplinary), 137, 219
  - survey of, 51, 88
  - vocational school, 258
- Areas
  - beyond the United States, 137, 219
  - small, 137, 219
- Argumentation and debate, 121, 181
- Arithmetic, 130, 200, 203, 204, 205
  - business, 130, 202
- Army
  - branches of the, 150, 250
  - Junior ROTC, 149, 248
- Art, 110, 158
  - club, 146, 243
  - equipment and supplies, 53, 100
  - history, 110, 159
  - history and theory, 110, 159
  - metals, 128, 196
  - studio, 110, 159
  - theory, 110, 159
- Articulation
  - of elements of the instructional program, 25, 34, 75
- Arts
  - and crafts, 127, 193
  - communicative, 127, 193
  - dramatic, 122, 182
  - English language, 120, 177
  - general industrial, 129, 197
  - industrial, 128, 195
  - performing, 127, 193
- Asia, 137, 219
- Aspects of instructional program evaluated, 34, 74
- Assembly period, 32, 69
- Assignment
  - nature of, 25, 75
  - performance in, 25, 75
- Assistance
  - in understanding pupils, 27, 94
  - with development of skills and/or techniques of instruction, 27, 94
  - with evaluation, 27, 94
  - with individual pupils, 39, 91
  - with planning, 27, 94
  - with research activity, 27, 94
- Assistant
  - audiovisual, 147, 245
  - child care center, 141, 227
  - environmental health, 124, 187
  - hospital children's division, 141, 227
  - interior decorator, 141, 227
  - laboratory, 148, 245
  - library, 148, 245
  - medical, 124, 188
  - office, 148, 245
  - optometrist, 124, 187
  - sanitation, 124, 187
- Assistants
  - administrative, 136, 217
  - personnel, 136, 216
- Assisting
  - dental, 123, 185
  - medical laboratory, 123, 186
  - orthopedic, 124, 188
- Associate degree, 38, 46, 85
- Association
  - accrediting, 43, 66
  - business, 43, 66
  - girls' recreation, 148, 246
  - Office Education, 147, 243, 213
  - professional, 43, 66
- Association—Continued
  - regional accrediting, 43, 66
  - student nurses, 147, 244
  - technical, 43, 66
  - Young Farmers, 147, 244
- Astronautics, 134, 212
- Astronomy, 133, 212
- Athletic and sport cocurricular activities, 147, 244
- Athletics
  - interscholastic, 262
  - intramural, 262
- Atomic and molecular structure, 133, 211
- Attendance
  - accounting, 28, 96
  - average daily, 258
  - certificate of, 38, 46, 85
  - percentage of, 263
  - services, 41, 93
- Attendance area
  - average number of children per, 258
- Attitudes, 51, 89
- Atypical
  - characteristic, 258
  - pupil, 258
- Audio equipment and supplies, 53, 99
- Audiolingual approach, 258
- Audiology services, 27, 40, 93
- Audiovisual
  - assistant, 147, 245
  - equipment and supplies, 53, 100
  - room, 52, 98
  - services, 27, 39, 41, 91, 93, 94
- Auditing, 111, 161
- Auditorium, 52, 98
- Auditory handicap, 258
- Auditory training
  - correction, 146, 241
  - development, 146, 241
  - stimulation, 146, 241
- Australasia, 137, 219
- Automotive, 117, 170
  - body and fender, 142, 229
  - mechanics, 142, 229
  - services, 142, 229
  - specialization, 142, 229
  - technology, 140, 224
- Autonomous schools, 22, 63
- Average
  - daily attendance, 258
  - daily membership, 258
  - mark-point, 36, 44, 80
  - membership per school, 258
  - number of children per attendance area, 258
  - number of children per local basic administrative unit, 258
- Aviation occupations, 142, 229
- Avocational
  - experience, 146, 242
  - information, 146, 242
- Award, honor, 51, 86
- Awarding of units of value, 51, 85

B

- Bachelor's degree, 258
- Background
  - of the instructional program, 33, 44, 71
  - pupil, 37, 81
  - socioeconomic, 37, 81
- Bacteriology, 132, 210
- Badminton, 126, 192
- Baker, 144, 236
- Balance, 258
- Balance beam, 127, 192
- Band, 132, 209
  - concert, 132, 209
  - dance, 147, 244
  - marching, 132, 209
  - pep, 147, 244
  - stage, 132, 209

Banking, money and, 138, 220
Barbering, 144, 235
Bars
  horizontal, 127, 192
  parallel, 127, 192
Basal reader program, 120, 177
Baseball, 127, 193
Basic
  design, 110, 159
  research, 28, 95
Basic education
  adult, 257
  defined, 258
Basketball, 127, 193
Beam, balance, 127, 192
Beginning reading, 120, 177
Behavior, 132, 210
  appropriate, 51, 89
  delinquent, 260
  primitive, 137, 219
  unsatisfactory, 38, 86
Behavioral difficulty, 39, 86
Basis
  for promotion, 38, 84
  for selection or grouping, 37, 80
Benefits of standardized information, 1
Biblical literature, 120, 179
Bicycle, motor bike, other
  Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
  Safety and Driver Education, 149, 248
Biochemistry, 132, 210
Biography, 120, 179
Biological
  interrelationships, 134, 212
  sciences, 132, 210
Biology
  club, 146, 243
  developmental, 132, 210
  environmental, 108, 155
  molecular, 132, 210
Biometrics, 132, 210
Biophysics, 132, 210
Blind, 45, 82
Block of time, 32, 43, 68, 70
Blueprint reading, 142, 230
Board of education, 25, 73
Boarding school, *see* Residential school
Body
  and fender, 142, 229
  care, personal grooming, and, 124, 189
  dynamics, 125, 191
  movement, rhythms, and, 132, 209
Bonding, chemical, 133, 211
Bookbinding, 143, 233
Bookkeepers, 134, 214
Bookkeeping, 112–162
  first course, 112, 162
  second course, 112, 163
  third course, 112, 163
  fourth course, 112, 163
  machine, 112, 163
Books and materials
  guidance in selection of, 39, 41, 91, 94
Books, library per pupil, 262
Books, reference, 53, 99
Botany, 132, 210
Bowling, 126, 192
Boy Scouts of America, 148, 246
Boy's Nation, 146, 243
Braille reading and writing, 145, 240
Branch campus, 258
Branches of the Army, 150, 250
Brazing and soldering operations, 143, 235
Broad fields, 46, 54, 100
Budget
  control, 112, 163
  management analysts, 136, 217
Budgeting and analysis, 108, 155
Building
  permanent, 263
  portable, 263
  pyramids, 127, 192
Built-in equipment, 99
Business, 111, 160
  and industry economics, 138, 219
  and management principles, 114, 166
  arithmetic, 130, 202
  arithmetic or mathematics, 112, 163
  association, 43, 66
  commercial or industrial facility, 57, 197
  communications, 112, 163
  correspondence, 112, 163
  data processing systems occupations, 134, 214
  equipment and supplies, 53, 100
  ethics, 112, 164
  exploratory, 114, 166
  finance, 112, 164
  government relationships, 119, 176
  law, 112, 164
  machine maintenance, 142, 230
  machines, 113, 164
    first course, 113, 164
    second course, 113, 164
  management, farm, 108, 155
  organization and management, 115, 167
  principles, 114, 167
  psychology, 113, 164
  statistics, 113, 164
Buying, 118, 173
  retail, 118, 173

C

Cabinetmaking, millwork and, 144, 238
Cafeteria or lunchroom, 258
Cafetorium, 52, 98
Calculating and listing machines, 113, 164
Calculations, chemical, 133, 211
Calculus, 130, 202
  with analytical geometry, 130, 303
Calendar months
  in regular school term, 31, 67
  in summer school term, 31, 67
Calendar weeks
  in summer school term, 31, 67
Cameras, 53, 99
Campaigns
  advertising, 118, 174
  advertising media and, 112, 162
Camp Fire Girls, 148, 246
Camping, 126, 192
Campus
  branch, 258
Canada, 137, 219
Card, report, 36, 80
Care
  and guidance of children, 128, 195
  dental, 40, 92
Career
  counseling, 39, 91
  guidance, 51, 89
  intentions, 24, 72
Careers, health, 124, 189
Carpentry, 142, 231
Carrel, study, 52, 99
Casework, 258
Cashiers, 134, 214
Casualty insurance, 119, 175
Cellular phenomena (cytology), 132, 210
Center
  learning resources, *see* Instructional materials center, 261
  resource, 265
  student union and/or student activity, 148, 245
Central
  administration, 22, 63
  administrative staff, 25, 73
  instructional staff, 25, 73
  supply technician, 124, 188

Ceramics, 128, 196,
  pottery and, 110, 160
Cereal grains, 109, 157
Ceremonies, Drills, Commands, and, 150, 251
Certificate, 51, 86
  of attendance, 38, 46, 85
  of completion, 38, 46, 85
  of high school equivalency, 38, 46, 85
  of training, *see* Certificate of completion, 85
Certification, 185
  status, 25, 75
C.P.A. review, 111, 162
Chalkboards, 53, 99
Change, cultural, 137, 218
Changes, earth, 134, 212
Characteristic, atypical, 258
Characteristics
  and needs of pupils, 24, 33, 72
  of drivers, 148, 247
  of pupil group, 24, 33, 72
  of staff, 26, 34, 77
  of the community, 24, 33, 71
  personality, 55, 103
Cheerleading, 147, 244
Chef/cook, 144, 236
Chemical
  bonding, 133, 211
  calculations, 133, 211
  reactions, 133, 211
  technology, 140, 224
Chemicals, agricultural, 108, 156
Chemistry, 133, 211
  inorganic, 133, 211
  organic, 133, 211
  physical, 133, 211
Child
  care center assistant, 141, 227
  development, 127, 194
Children
  care and guidance of, 128, 195
  exceptional, 260
  migrant, 44, 81
Children's literature, 121, 180
Choir, 147, 245
Choir, chorus, and/or glee club, 131, 208
  female, 131, 208
  male, 131, 208
  mixed, 131, 208
Choral speech, 121, 182
Chorus, 147, 245
Christmas trees, 110, 158
Chronological age, 38, 84
Circulation
  materials and services, 41, 94
  services, 39, 91
Citizenship
  education, 137, 219
  knowledge and understanding, 51, 89
  traffic, 148, 207
Civic activities, 28, 96
Civil
  defense, 148, 247
  technology, 140, 224
Civilian aviation and facilities, 151, 252
Civilization
  nonwestern, 139, 221
  western, 139, 221
  world, 139, 221
Class
  definition, 55
  duration of time in, 51, 85
  general continuation, 48, 62
  lists, 28, 96
  meetings, miscellaneous times for, 56, 70
  multigrade, 262
  multigraded, 262
  nongraded, *see* Ungraded class
  officer, 147, 245
  organizational arrangement, 48, 62
Class—Continued
  part-time general continuation, 263
  period, 49, 70
  position of, in sequence, 48, 65
  prekindergarten, 263
  regular, [illegible]
  schedul [illegible] 3, 96
  self-contained, *see* Self-contained class
  special for exceptional pupils, 266
  time in, 38, 84
  time segment for, 49, 56, 70
  ungraded, 267
Class period
  definition, 69
  minutes in, 32, 43, 49, 56, 69
Class periods
  combination of, and modules, 32, 68
  nonuniform, 32, 68
  nonuniform, 32, 68
  number of, in typical daily session, 32, 69
  number of, in typical week, 32, 69
  per week per unit of value, 35, 50, 78
  uniform, 32, 68
Classes
  number of, in sequence, 48, 65
Classical languages, 122, 183
  Arabic (classical), 122, 183
  Chinese (classical), 122, 183
  Greek (classical), 122, 183
  Hebrew (classical/Biblical), 122, 183
  Latin (classical), 122, 183
    selected emphases, 122, 183
Classical literature, 120, 179
Classification
  of items of information about curriculum and instruction, 20, 58
  of items of information about subject-matter areas and cocurricular activities, 106
Classroom
  community, 137, 219
  mobile, 262
  regular (movable partitions), 52, 97
  regular (permanent walls), 52, 97
  teacher, 258
  teachers per 1,000 pupils in average daily membership, 267
Clerical
  and office supervisors, 136, 217
  practice, 113, 164
Clerk typists, 136, 217
Clerks
  communication systems, 135, 215
  correspondence, 135, 215
  file, 135, 215
  general office, 135, 215
  mail and postal, 135, 215
  office managers and chief, 136, 217
  planning and production, 135, 216
  quality control, 135, 216
  receptionists and information, 135, 216
  shipping and receiving, 135, 216
  stock and inventory, 135, 216
  traffic, rate, and transportation, 135, 216
Climatology, 134, 212
Closed circuit
  audio equipment, 53, 100
  audio and visual equipment, 53, 100
Clothing
  and textiles, 127, 194
  management production, and services, 128, 195
Club(s)
  art, 146, 243
  biology, 146, 243
  debate, 146, 243
  Distributive Education, of America, 146, 170, 243
  dramatics, 146, 243
  family living, 146, 243
  folk music, 148, 246
  foreign language, 146, 183, 243

Club(s)—Continued
  4-H, 146, 243
  glee, 147, 245
  hobby, 148, 246
  Industrial Arts Student, 146, 195, 243
  international relations, 146, 243
  journalism, 146, 243
  literary, 147, 243
  mathematics, 147, 243
  music, 147, 243
  photography, 147, 243
  poster and display, 148, 245
  school service, 148, 245
  science, 147, 209, 243
  social studies, 147, 243
  speech, 147, 244
  stamp, 148, 246
  Vocational Industrial, of America, 147, 228, 244
Cocurricular activities, 25, 34, 75, 146, 242
  related to program of studies, 47, 105
Cocurricular activity
  definition, 47, 62
  items, describing a, 12, 47
  specifications for, 48, 59
Coeducational, 37, 81
Cognitive, thinking, 51, 89
Collections
  Business, 113, 165
  Distributive Education, 118, 173
College
  algebra, 130, 202
  community, 259
  course, 28, 95
  junior, *see* Junior college
  preparatory program, 43, 61, 83
Combination
  of courses, 43, 62
  of plans, 39, 91
  welding, 143, 235
Combined
  community college and secondary school plant, 258
  elementary and secondary school plant, 258
  public and nonpublic control, 30, 63
Combo, 147, 244
Coming of the aerospace age, 151, 252
Command, Leadership, Drill, and Exercise of, 149, 151, 152, 249, 255, 256
Commendation, letter of, 51, 86
Comments, descriptive, 36, 79
Commercial
  art occupations, 142, 230
  facility, 57, 97
  fishery occupations, 142, 230
  photography occupations, 142, 230
  pilot training, 141, 227
Commercial design
  Art, 110, 159
  Distributive Education, 119, 174
Commitment, court, 37, 83
Committee
  advisory, 24, 73
  production, 24, 73
  project, 28, 94
  steering, 24, 73
Communicable and chronic disease:
  prevention and control, 124, 189
Communicable diseases, 27, 40, 92
Communication
  manual, 145, 240
  skills, 145, 239
  systems clerks, 135, 215
  theory, 121, 182
  typing for, 145, 240
Communications, 143, 150, 232, 250, 251
  business, 112, 163
  for distribution, 119, 176
  to parents about health problems of pupils, 40, 92
Communicative arts, 127, 193
Community
  agencies, coordination with, 28, 96
  Air Force, the, 151, 252
  characteristics of, 24, 71
  classroom, 137, 219
  college, 259
  development, 137, 218
  general type of, 33, 71
  health, 124, 189
  health aide, 124, 188
  local, 137, 219
  needs and interests, identification of, 28, 96
  opinion, 33, 72
  recreation programs, 28, 96
  representatives of, 25, 74
  resources, 26, 76
  school, 137, 219
  school system relations, 24, 72
  services, 28, 96
  welfare activities, 28, 96
Community, The, 139, 223
Comparative
  analysis, 54, 101
  economics, 138, 219
  systems, 139, 222
Compass, map reading and use of the, 151, 255
Compilation, maintenance, and use of pupil health records, 40, 92
Completion, 45, 85
  certificate of, 42, 46, 85
  of minimum number of units of value, 45, 85
  of program of studies, 45, 84
  of requirement, but no unit of value awarded, 51, 86
  of self-contained class or course, 50, 84
  of school work, 259
  practice, 57, 84
  recognition for, 46, 85
  requirements for, 45, 84
Composition, 121, 180
  makeup, and typesetting, 143, 233
  of population, 33, 71
Comprehensive
  high school, 259
  homemaking or home economics, 127, 194
Computation, frequency of, 36, 80
Computer
  and console operators, 134, 214
  assisted instruction, 259
  introduction, 113, 165
  mathematics, 130, 203
  programmer, 141, 227
  programming, 113, 165
Computer operation, data processing and, 113, 165
Computer-oriented mathematics, 113, 165
Concept, 259
Concert band, 132, 209
Condition, physical, 39, 86
Conditioning
  air, 141, 229
  exercises, 125, 191
Conduct, Courtesies, Customs and Rules of, 149, 249
Conference, 28, 94
  parent, 36, 80
Congressional district, 259
Conservation
  (environment), 132, 210
  environmental education, 137, 219
Constitution, The, 139, 222
Construction, 128, 195
  and maintenance, agricultural, 109, 156
  and maintenance trades, 142, 231
Consultant service
  to instructional staff, 39, 91
  to staff members, 27, 91
Consultants, 25, 74
Consumer
  economics
    Business, 114, 166
    Social Sciences/Social Studies, 138, 220

Consumer—Continued
  education
    Business, 113, 165
    Home Economics, 127, 194
    Social Sciences/Social Studies, 138, 219
  health, 124, 189
  mathematics, 130, 202
Consumption, economics of, 119, 176
Contemporary world affairs, 139, 222
Content
  enrichment, 51, 88
  for all schoolwork, 51, 87
  for entire course, 51, 87
  for portion outside self-contained class, 51, 87
  for portions of activity, 51, 87
  for portions of course, 51, 87
  for portions of schoolwork within self-contained class, 51, 87
  instructional, 34, 74
  of cocurricular activity, 51, 87
  of entire activity, 51, 87
  of handbook, 3–5
  of reproduced materials, 26, 78
  scope of, 26, 78
  treatment of, 51, 88
Continuation Class
  general, 48, 62
  part-time general, 263
Continuing education, 259
Continuity, 259
Continuous promotion, 38, 84
Contract
  awarded to another agency, 43, 63
  awarded to this school, school system, or agency, 43, 63
  for instruction or service, 43, 63
  source or recipient of, 43, 63
Contracted services, 259
Control
  budget, 112, 163
  by institution, 30, 63
  combined public and nonpublic, 30, 63
  expense, 119, 176
  filing and record, 114, 166
  nonpublic, 22, 30, 63
  numerical, 129, 198
  of school, 30, 62
  of school system, 22, 62
  public, 22, 62
Conversion, energy, 140, 226
Cook/chef, 144, 236
Cooling, 140, 225
Cooperative
  education, 259
  on-the-job training, 259
  part-time employment, 259
  work experience, 259
Cooperatively developed
  criteria, 25, 74
Coordinate, 37, 81
Coordination
  of information about individual schools, 28, 95
  with community agencies, 28, 96
Copywriting, advertising
  Business, 112, 162
  Distributive Education, 118, 174
Core units, 46, 100
Corps
  drum and bugle, 147, 244
  history and traditions of the Marine, 151, 254
  introduction to Marine Corps Junior Reserve Officer Training, 151, 254
  organization of the Marine, 152, 256
Correction
  auditory training, 146, 241
  language, 145, 239
  speech, 145, 239
  visual, 146, 242
Correlation, 259
Correspondence, 54, 101
  business, 112, 163
  clerks, 135, 215
Cosmetology, 144, 235
Cosmology, 134, 212
Cost accounting, 111, 161
Cotton, 109, 157
Council, student, 148, 245
Counseling
  career, 39, 91
  educational, 39, 91
  health, for individual pupils, 40, 92
  personal/social, 39, 91
  psychological, 40, 93
  with parents, 27, 39, 91
  with pupils, 27, 39, 91
Counterinsurgency, 150, 250
Country, cross, 127, 193
Course
  advanced placement, 48, 62
  college, 28, 95
  correlated, 54, 100
  definition, 47, 62
  discrete, 54, 100
  items describing a, 47, 105
  mark value for, 50, 79
  noncredit, 262
  of study, 259
  or courses previously completed, 50, 83
  position of, in sequence, 48, 65
  specifications for, 48, 59
  structure of, 54, 100
  time segment for, 49, 70
  vocational, 48, 62
Courses, 25, 34, 75
  combination of, 43, 62
  correlated, 46, 100
  discrete, 46, 100
  elective, 46, 88
  in program of studies, 47, 105
  mark value for, 36, 44, 79
  noncredit, required, 46, 85
  number of, in sequence, 48, 65
  offered by department, 47, 105
  offered in program of studies, 46, 88
  required, 46, 88
  (summary information), 47, 104
Court commitment, 37, 83
Courtesies, Customs, and Rules of Conduct, 149, 249; 151, 254
Courts of law, 28, 96
Crafts, 110, 160
  arts and, 127, 193
  (industrial), 128, 195
  small, 125, 191; 126, 192
Creative
  dance, 148, 246
  dramatics, 122, 182
  writing, 121, 181
Creativity, 51, 89
Credit, 35, 50, 78, 79, 259
  and collections
    Business, 113, 165
    Distributive Education, 118, 173
  awarded, 50, 79
  finance and, 117, 170
  hour, *see* Credit hour
  not awarded, 50, 79
Credit hour
  quarter, 35, 78, 264
  semester, 35, 78, 265
Crew-served weapons, 149, 249
Crippled, 45, 82
Crisis teacher, 259
Criteria
  approval and/or accreditation, 25, 74
  cooperatively developed, 25, 74
  for items in handbook, 1
Critical judgment, 51, 89

Criticism
  speech, 121, 182
  theatre, 122, 182
Crops, 108, 154
Cross country, 127, 193, 147, 244
Cross-references, 107, 153
Cub Scouts (Boy Scouts of America), 148, 246
Cultural
  change, 137, 218
  evolution, 137, 218
  handicap, 259
  handicaps, 44, 81
  psychology, 137, 218
  transmission, 137, 218
  values, 137, 218
Culturally
  disadvantaged, 44, 81
Culture, 137, 218
  personality and, 137, 218
Cumulative records
  maintenance and interpretation of individual pupils, 40, 92
Curling, 127, 193
Current
  employment, 45, 50, 83
  expenditures, 259
  expenditures per pupil, 259
    in ADA, 259
    in ADM, 259
    per day, 259
    per hour course meets, 260
Curriculum
  and instruction, *see* Curriculum
    and instruction
  definition, 3
  guide, 260
  improvement, *see* Curriculum improvement
  laboratory, 27, 41, 94
  spiral, 266
Curriculum and instruction
  development of records and reports about, 9–14
  guidelines for obtaining and using information about, 2
  measures involving, 16, 17
  need for information about, 6
  planning and implementing a system of information about,
    8, 9
  relating to other areas of educational information, 15–17
  reports about, 9–14
  responsibility for information about, 6–8
  users of information about, 7
  use of information in research and experimentation, 18, 19
Curriculum improvement, 24, 33, 44, 71
  activity, 26, 35, 44, 77
  planning for, 26, 77
  provisions for, 24, 34, 73
Cursive writing, 120, 178
Curtailed session, 31, 68
Custodial
  and detention care, 28. 96
  mentally retarded, *see* Severely mentally retarded, 82
  services, 142, 231
Cutter, meat, 144, 236
Cutting, welding and, 143, 235
Cycle scheduling, 260
Cycling, 126, 192
Cytology (cytotechnology), 123, 185
(Cytotechnology), cytology, 123, 185

D

Daily
  living, safety in, 125, 190
  session, 31, 68
Dairy
  products, 109, 157
  technology, 140, 226
Dance, 127, 193
  band, 147, 244
  creative, 148, 246
  dance (physical education), 126, 191
  rhythms, and dramatic activities, 126, 191
Data
  collection findings, 25, 34, 74
  collection media, 35, 34, 74
  methods and systems-procedures analysts, 136, 217
Data processing
  accounting, 111, 162
  and computer operation, 113, 165
  introduction to, 113, 165
  punch card, 114, 165
  systems, 113, 165
Day
  hour of, 56, 70
  school, 30, 61
  usual number of modules for unit of value, 33, 69
Days
  in session, *see* Days in session in regular school term, 23, 67
  number of, per week, 49, 70
  of week, 49, 56, 70
Deaf, 45, 82
Debate
  argumentation and, 121, 181
  club, 146, 243
Decorating
  interior, 142, 230
  painting and, 142, 231
Defense
  civil, 148, 247
  of the United States, 151, 253
Definitions, basic, 3
Degree, 260
  associate, 38, 46, 85
  bachelor's, 258
Delinquency prone, 45, 82
Delinquent
  behavior, 260
  juvenile, 262
Democracy, Voice of, 147, 244
Demonstration, 28, 54, 94, 101
Demonstrator, home equipment, 141, 227
Dental, 123, 185
  assisting, 123, 185
  care, 40, 92
  health, 124, 189
  hygiene (associate degree)
  Health Occupations Education, 123, 185
    Technical Education, 141, 227
  laboratory technology, 123, 185
  screening, 40, 92
  services, 40, 92
Department, 260
  courses offered by, 47, 105
Departmentalized organization, 260
Descriptive comments, 36, 79
Descriptive geometry, 128, 196
Design
  advertising and graphic, 110, 159
  architectural, 110, 160
  basic, 110, 159
  commercial, 110, 159; 119, 174
  environmental, 110, 160
  fashion, 110, 160
  for the performing arts, 110, 159
  industrial, 128, 196
  industrial and product, 110, 160
  interior, 110, 160
  machine and tool, 140, 226
  product, 142, 230
  technical theatre and, 122, 182
  three-dimensional, 110, 159
  two-dimensional, 110, 159
Development
  auditory training, 146, 241
  child, 127, 194
  community, 137, 218
  foremanship, supervision, and management, 143, 233
  growth and, 124, 189
  in area, 51, 89
  intellectual, 38, 84
  language, 145, 239

Development—Continued
  of guide in subject-matter areas, 26, 77
  of judgment, 148, 247
  of other reproduced materials, 26, 77
  olfactory, 146, 242
  personal and social, 40, 92
  physical, 55, 103
  research and, 129, 199
  self-concept, 145, 240
  speech, 145, 239
  tactile and kinesthetic, 146, 241
  visual, 146, 242
  vocational and avocational skills, 146, 242
Developmental
  biology, 132, 210
  psychology, 139, 222
  reading program, 120, 177
Developments, new, 149, 250
Dexterity skills, 145, 240
Diagnosis, 54, 101
  referral for, 40, 92
Diagnostic teacher, 260
Dialectology, 120, 179
Dictating machine, 53, 99
Diction, voice and, 120, 178; 121, 182
Dictionary
  of Occupational Titles, 88
  skills, 120, 178
Die making, tool and, 143, 235
Die sinking, 143, 235
Diesel mechanic, 143, 232
Differentialized Curriculum for Handicapped Pupils, 145, 239
Differentiated high school diplomas, 38, 85
Differentiation, 260
Difficulty
  behavioral, 39, 86
  level of, 48, 56, 65
  or ability, level of, 131
Diploma
  high school, 38, 46, 85
  uniform high school, 38, 85
Diplomas, differentiated high school, 38, 85
Direct
  mail advertising
    Business, 112, 162
    Distributive Education, 119, 174
  pupil-teacher interaction, 54, 101
  sales, 119, 175
Directed observation, 54, 101
Direction
  of inservice education activities, 27, 94
  other procedures for, 55, 102
  principal medium of, 54, 101
  principal methods of, 54, 101–102
Discipline, 260
Discussion, 54, 101; 121, 182
Disease
  and pest control, plant, 108, 155
  prevention and control:
    communicable and chronic, 124, 189
Diseases, prevention and control of communicable, 40, 92
Dispensing, ophthalmic, 124, 187
Display
  boards, 53, 99
  retail
    Business, 116, 168
    Distributive Education, 119, 174
  window, 142, 230
Distribution
  I, 117, 172
  I (cooperative), 117, 172
  I (project), 117, 172
  II, 118, 172
  II (cooperative), 118, 172
  II (project), 118, 172
  III, 118, 172
  III (cooperative), 118, 172
  III (project), 118, 172
  and marketing, 170

Distribution—Continued
  communications for, 119, 176
  food, 117, 171
Distributive Education, 117, 170
Distributive Education Clubs of America 146, 243
Distributive Education, 117
  Cocurricular Activities, 146, 243
District
  congressional, 259
  school, 265
Diving, 125, 191
  skin and scuba, 125, 191
Division
  of school year, 31, 66
  of regular school term, 31, 66
Double sessions, 31, 68
Drafting, 128, 196
  architectural, 128, 196
  occupations, 143, 232
  technology, 128, 196
Drama
  English Language Arts, 121, 180
  Health and Safety in Daily Living, Physical Education, and Recreation, 127, 193
Dramatic
  arts, 122, 182
  literature, 122, 182
Dramatic activities, 126, 192
  dance, rhythms, and, 126, 191
Dramatics
  club, 146, 243
  creative, 122, 182
Dramatization, 54, 101
Drawing, 110, 160
  mechanical, 128, 196
Dressmaking, 144, 237
Drill, 54, 102
  Air Force Traditions, Customs, and Flight, 151, 252
  techniques of instruction and ceremonial, 151, 253
Drills, Commands, and Ceremonies, 150, 251
Driver education, 148, 247
  equipment and supplies, 53, 100
Drivers, characteristics of, 247
Driving
  alcohol, drugs, other harmful substances, and, 148, 247
  skills, 148, 247
Dropouts, former, 44, 81
Drum and bugle corps, 147, 244
Drycleaning, 143, 233
Drywall installation, 142, 231
Dual
  enrollment, 260
  sports, individual and, 126, 192
Duplicating
  machine operators, 135, 215
  machines, 113, 164
Duration of time, 38, 46; 51, 85
Dynamics, water, 125, 191

E

Early childhood education, 260
Early elementary years or grades:
  early childhood education, 144, 238
Earth
  changes, 134, 212
  space sciences, 133, 212
East, Middle, 137, 219
Ecology, 132, 210
Economic
  geography, 114, 166
  thought, history of, 138, 220
Economics, 114, 166; 138, 219
  business and industry, 138, 219
  comparative, 138, 219
  consumer, 114, 166; 138, 220
  home, 127, 194
  labor, 114, 166
  of consumption, 119, 176

Economics—Continued
  of marketing, 119, 176
  principles of, 114, 166; 138, 220
  resource, 138, 220
Editorial writing, 121, 181
Educable mentally retarded, 45, 82
Education, 139, 223
  adapted physical, 125, 191
  adult, 257
  adult basic, 257
  agency, local, 262
  agency, State, 21, 59
  basic, 258
  citizenship, 137, 219
  consumer, 113, 165; 127, 194; 138, 219
  conservation-environmental, 137, 219
  continuing, 259
  cooperative, 259
  Distributive, 117, 170
  driver, 148, 247
  early childhood, 260
  elements of aerospace, 151, 252
  for leisure, 51, 89
  Health Occupations, 123, 184
  higher, 261
  inservice, *see* Inservice education
  introduction to aerospace, 150, 152
  miscellaneous health occupations, 124, 187
  miscellaneous technical, 141, 227
  outdoor, 263
  physical, 125, 191
  posture, 126, 191
  prevocational, 264
  safety, 148, 247
  Safety and Driver, 148, 246
  special, 266
  Technical, 140, 223
Educational
  and career intentions, 24, 72
  assistants and training specialists, 136, 216
  counseling, 39, 91
  information, 39, 92
  level of parents, 33, 72
  psychology, 139, 222
Educators' organization, 25, 74
Effective store speech, 119, 176
Eggs, *see* Meat, fish, poultry, eggs, 109, 157
Elective, 50, 84
  courses, 45, 46, 85
  for all pupils, 50, 84
  for pupils in specified programs of studies, 50, 84
Electric
  power generating plants, 144, 237
  welding, 143, 235
Electrical
  appliances, 142, 229
  occupations, 143, 232
  technology, 140, 225
Electrician, industrial, 143, 232
Electricity
  Industrial Arts, 128, 196
  Trade and Industrial Occupations, 142, 231
  and magnetism, 133, 211
Electricity/electronics, 128, 196
Electrification, agricultural, 109, 156
Electrocardiograph technician, 124, 188
Electroencephalograph technician
  Health Occupations Education, 124, 187
  Technical Education, 141, 227
Electromechanical technology, 140, 225
Electronic
  reproduction, 145, 240
  technology, 140, 225
Electronics
  industrial, 143, 232
  industrial arts, 128, 197
  natural sciences, 133, 211
  Navy Junior ROTC, 150, 251
  occupations, 143, 232
Elementary
  functions, 130, 203
  instructional level, 261
  program, typical local, 43, 61
  school, *see* Elementary school, 29, 60
Elementary school, 29, 60
  industrial arts, 128, 197
  industrial arts in the, 129, 197
  mathematics, 130, 200
  science, *see* General science (including elementary school
    science)
Elements of aerospace education, 151, 252
Elements of national security
  part I, 151, 254
  part II, 151, 254
Emergency illness and injury, 27, 92
Emotional handicap, 260
Emotionally
  handicapped, 45, 82
  disturbed, 45, 82
Employability, 45, 83
Employed youth under age 18, 44, 81
Employee
  supervision, 119, 176
  training, 119, 176
Employment
  agencies, 28, 96
  cooperative part-time, 259
  current, 45, 83
  gainful, 261
  minimum qualifications for, 25, 75
Energy conversion, 266, 140
Enforcement, laws and ordinances of, 148, 207
Engineering, 148, 247
Engineering-related technology, 140, 224
English Language Arts, 120, 177
English language, history of the, 120, 179
English literature, 120, 179
Enrichment program, 260
Enrollment
  dual, 260
  in given program of studies, 50, 83
Ensemble(s)
  instrumental, 132, 209
  small instrumental, 132, 209
  small vocal, 131, 209
  vocal, 147, 245
Entire session (self-contained class), 32, 43, 68
Entomology
  Agriculture, 108, 155
  Natural Sciences, 132, 210
Entrance, 83, 84
  examination, 37, 45, 50, 83
  into program of studies, 45, 83
  into school, 37, 83
  into section, 57, 83
  into self-contained class, course, or cocurricular activity,
    50, 83
  requirements for, 37, 83, 50, 83
(Environment), conservation, 132, 210
Environmental
  biology, 108, 155
  conservation, education, 137, 219
  design, 110, 160
  health, 124, 187, 189
  health assistant, 124, 187
Environmental-control technology, 140, 225
  cooling, 140, 225
  heating, 140, 225
  refrigeration, 140, 225
Equilibrium, 133, 211
Equipment, 260
  built-in, 99
  hardware, building materials, farm and garden supplies,
    and, 117, 171
  heavy (construction), 142, 231
  movable, 26, 34, 76
  use of devices and, 145, 241

Equipment and supplies, 46, 99
  art, 53, 100
  audio, 53, 99
  audiovisual, 53, 100
  business, 53, 100
  driver education, 53, 100
  for specific type of activity, 53, 100
  homemaking, 53, 100
  industrial, 53, 100
  instructional, 54, 99, 100
  music, 53, 100
  physical education, 53, 100
  scientific laboratory, 53, 100
  three-dimensional and manipulative, 53, 100
  visual, 53, 99
Equivalency
  certificate of high school, 46, 85
  examination, 38, 51, 85
  full-time, 261
Equivalent weeks in regular school term, 31, 67
Essay, 121, 180
Ethical values, 52, 89
Ethics
  Business, 112, 164
  Social Sciences/Social Studies, 139, 221
Ethnic origin, 37, 81
Ethanography, 137, 218
Ethnology, 137, 219
Ethnoscience, 137, 219
Europe, 137, 219
Evaluating and reporting pupil progress, 35, 44, 49, 57, 78
Evaluation
  and curriculum improvement, *see* Evaluation and curriculum improvement
  assistance with, 27, 94
  frequency of, 25, 34, 74
  of quality, 17–19
  procedures, 25, 26, 34, 55, 74, 78, 103
  services, 28, 40, 92, 95
  techniques, 119, 116
Evaluation and curriculum improvement, 24, 33, 44, 49, 71
  of school, 33
  organization for, 24, 34, 49, 73
  persons or groups involved in, 25, 34, 49, 73
  procedures, 44, 49, 74
Evolution, 132, 210; 137, 219
  cultural, 137, 218
Examination
  entrance, 37, 45, 83
  equivalency, 46, 51, 85
Examinations, periodic physical, 40, 92
Exceptional children, 260
  percentage of, in special classes or schools, 263
  school for, 265
Exceptional pupils, 260
  special class for, 266
  special instructional space for, 52, 97
Exceptionality, 24, 33, 72, 260, 267
Excess membership in public schools, 260
Exchange, matter-energy, 134, 213
Exclusion, legal, 38, 86
Executive secretary, 136, 217
Exercises, conditioning, 125, 191
Expenditures, current, 259
Expense control, 119, 176
Experience
  avocational, 146, 242
  field, 54, 102
  in service to others, 51, 89
  laboratory, 54, 102
  of staff, 25, 75
  prevocational work, 146, 242
  simulation driving, 148, 247
Experimentation, 54, 102
Exploration, space, 133, 212
Exploratory business, 114, 166
Explosives
  Health and Safety in Daily Living, Physical Education, and Recreation,
  Safety and Driver Education, 125, 190
Expository writing, 121, 181
Expulsion
  for unsatisfactory achievement, 38, 86
  for unsatisfactory behavior, 38, 86
Extended-day sessions, 260
Extended school day, 260
Extended secondary school, *see* Community college
Extension work, 260
Extra class activities, *see* Cocurricular activities

F

Fabrication, textile production and, 144, 237
Fabric maintenance services, 143, 233
Facilities, 26, 34, 76, 41, 97–99
  available for community use, 41, 96
  civilian aviation and, 151, 253
  designed for community use as well as for school use, 41, 96
  of school, 42, 97
  shared, 265
  within school system, 29, 103
Facility
  business, commercial or industrial, 42, 57, 97
  school, 42, 97
Factors evaluated, 49, 76
  in instructional services, 26, 77
  in programs of studies and in self-contained classes, courses, and cocurricular activities, 34, 76
Fall membership of school, 37, 80
Family, 139, 223
  background, 40, 92
  health, 127, 194
  relations, 127, 194
Family life education (including sex education), 124, 189
Family living club, 146, 243
Farm
  accounts, 108, 155
  business management, 108, 155
  mechanics, 108, 155
  organizations, 108, 156
Fashion
  design, 110, 160
  merchandising, 118, 173
  trends, 118, 173
Feature writing, 121, 181
Fee, 261
  payment of, 45, 50, 83
Feeds, 108, 156
Females, 37, 81
Fencing, 126, 192
Fertilizers (plant food), 109, 156
Fiction, 121, 180
Field
  experience, 54, 102
  hockey, 127, 193; 147, 244
  track and, 126, 192; 147, 244
  trip, 54, 102
  trips, 28, 96
File clerks, 135, 215
Filing, 114, 166
  and record control, 114, 166
  office machines, and general office clerical occupations, 135, 215
Film, 122, 182
  projectionist, 147, 245
Filmstrips and/or slides, 53, 99
  with sound, 53, 100
Final mark, 261
Finance
  and credit, 117, 170
  business, 112, 164
  personal, 115, 167
  real estate
    Business, 115, 167
    Distributive Education, 119, 176
Finances, 26, 34, 76
Financial
  aid services, 27, 40, 92
  and legal management, 108, 156

Fine motor skills, 145, 240
Fire
  and fire safety technology, 141, 227
  safety, 125, 190
Firearms, 125, 190
Fireman training, 144, 236
First aid, 124, 189; 150, 251; 151, 254
  hygiene and, 149, 249
First-year college mathematics
  for elementary school teachers, 130, 203
Fish
  including farms and hatcheries, 109, 158
  see Meat, fish, poultry, and eggs, 109, 157
Fishing, 126, 192
Fitness, physical, 52, 89; 124, 189
Five- or six-year high school, 29, 60
Flexible scheduling, 261
Flight
  space exploration: Manned and unmanned, 151, 253
  theory of aircraft, 151, 252
Floriculture, 109, 157
Floristry, 117, 171
Fluid power, 129, 198
Folk
  music club, 148, 246
  societies, 137, 218
Followup
  and evaluation services, 40, 92
  study, 261
Food
  distribution, 117, 171
  management, production, and services, 128, 195
  processing technology, 140, 227
  products, 109, 157
  program for needy children, 40, 92
  service supervisor
    Home Economics, 124, 188
    Technical Education, 141, 227
  services, 117, 171
Foods and nutrition, 124, 189; 127, 194
Football, 127, 193; 147, 244
Forces and motion, 134, 212
Foreign Language Club
  Cocurricular Activities, 146, 243
  Foreign Languages, 183
Foreign Languages, 122, 183
  classical languages, 122, 183
    Arabic (classical), 122, 183
    Chinese (classical), 122, 183
    Greek (classical), 122, 183
    Hebrew (classical/Biblical), 122, 183
    Latin (classical), 122, 183
      selected emphases: 122, 183
      culture, 122, 183
      listening comprehension, 122, 183
      reading, 122, 183
      speaking, 122, 183
      study of literature, 122, 183
      translation, 122, 183
      writing, 122, 183
    Modern foreign languages, 122, 183
    Arabic, modern standard, 122, 183
    Arabic, colloquial, 122, 183
    Chinese, modern Mandarin, 122, 183
    Chinese, Cantonese, 122, 183
    Czech, 122, 183
    Danish, 122, 183
    English as a foreign language, 122, 183
    French, 122, 183
    German, 122, 183
    Greek, modern, 122, 183
    Hawaiian, 122, 183
    Hebrew, Modern (Israeli), 122, 183
    Italian, 122, 183
    Japanese, 122, 183
    Norwegian, 122, 183
    Polish, 123, 183
    Portuguese, 123, 183
    Russian, 123, 183
    Spanish, 123, 183
    Swedish, 123, 183
      selected emphases: 123, 183
      culture, 123, 183
      listening and comprehension, 123, 183
      reading, 123, 183
      speaking, 123, 183
      study of literature, 123, 183
      translation, 123, 183
      writing, 123, 183
Foremanship, supervision,
  and management development, 143, 233
Forest protection, 110, 158
Forestry
  production, processing,
    management, marketing, and services, 109, 158
  technology, 141, 228
Forests, 109, 158; 110, 158
Former dropouts, 44, 81
Forum, 261
Foundry, 143, 234
4-H Club, 146, 243
Four-year high school, 29, 60
Frame, air, 142, 229
Free loan plan, 39, 91
Free selection, provisions for, 43, 62
Frequency
  of evaluation, 25, 34, 74
  of service, 56, 70
Fruits and vegetables, 109, 157
Full-day session, 31, 68
Full-time
  equivalency, 261
  equivalency of pupils, 37, 44, 80
  pupil, 261
  pupils, 37, 44, 80
Functionally illiterate, 44, 81
Functions
  elementary, 130, 203
Fundamental movements, 125, 191
Furnishings, home, 117, 171
Furniture and furnishings, 54, 100
Future Business Leaders of America
  Business, 161
  Cocurricular Activities, 146, 243
Future Farmers of America
  Agriculture, 153
  Cocurricular Activities, 146, 243
Future Homemakers of America
  Cocurricular Activities, 146, 243
  Home Economics, 194
Future Teachers of America (NEA), 146, 243

G

Gainful employment, 261
Games, water, 125, 191
Gas
  appliances, 142, 229
  welding, 143, 235
General
  business or introduction to business, 114, 166
  continuation class, 48, 62
  development in area, 31, 89
  education, music, 131, 208
  education program, 43, 50, 61, 83
  elementary years or grades, 144, 238
  industrial arts, 129, 197
  language, 122
  mathematics, 131, 203–204
  merchandise, 117, 171
  office clerks, 135, 215
  performance or achievement in schoolwork, 38, 85
  psychology, 139, 222
  science (including elementary school science), 132, 210
  secondary education, *see* General elementary education
    and general secondary education, 144, 238
  secondary years or grades, 145, 239
  semantics, 121, 181
  type of community, 33, 71

- General Elementary Education
  - and General Secondary Education, 144, 238
- Generative grammar, 120, 178
- Genetics
  - Agriculture, 107, 154; 108, 155
  - Natural Sciences, 132, 210
- Geochemistry, 134, 212
- Geographic areas, administration for, 22, 63
- Geographical location of school, 29, 59
- Geography, 138, 220
  - economic, 114, 166
  - historical, 138, 220
  - human (cultural), 138, 220
    - cartographic interpretation, 138, 220
    - circulation patterns, 138, 220
    - economic patterns, 138, 220
    - political patterns, 138, 220
    - population, 138, 220
    - settlement patterns, 138, 220
  - physical, 138, 220
    - atmosphere, 138, 220
    - biosphere, 138, 220
    - exosphere, 138, 220
    - hydrosphere, 138, 220
    - lithosphere, 138, 220
  - regional, 138, 220
    - agricultural regions, 138, 220
    - climatic regions, 138, 220
    - continental regions, 138, 220
    - culture regions, 138, 220
    - landform regions, 138, 220
    - manufacturing regions, 138, 220
    - political regions, 138, 220
    - population (human) regions, 138, 220
    - vegetation regions, 138, 220
- Geology, 133, 211; 133, 212
- Geometry, 131, 206
  - analytic, 131, 206
  - descriptive, 128, 196
  - in general mathematics, 204, 205
  - in mathematics (7th and 8th grades), 130, 201
  - plane, 131, 206
  - plane and solid, 131, 206
  - solid, 131, 207
- Geophysics, 134, 212
- Gifted and talented, 45, 82
- Girl Scouts of the U.S.A., 148, 246
- Girls
  - Athletic Association
    - Cocurricular Activities, 147, 244
    - Health and Safety in Daily Living, 124, 188
      - Physical Education, and Recreation, 189
  - Camp Fire, 148, 246
  - Nation, 146, 243
  - pregnant, 44, 81
  - recreation association, 148, 246
- Glazing, 142, 231
- Glee club, 147, 245
  - choir, chorus, and/or, 131, 208
    - female, 131, 208
    - male, 131, 208
    - mixed, 131, 208
- Globes, 53, 99
- Glosary, 257–267
- Golf, 126, 192; 147, 244
- Government
  - American, 139, 222
  - programs, 108, 156
- Governmental and institutional accounting, 111, 162
- Grade, 26, 30, 64, 77
  - or year standing, 37, 45, 50, 83
  - placement, 56, 64
- Graded school, 261
- Grades
  - intermediate elementary, 261
  - lowest and highest, 23, 30, 64
  - primary, 264
  - span of, 26, 35, 77
  - upper elementary, 267
- Graduation
  - and other termination practices, 38, 84–86
  - recognition for, 38, 85
  - requirements for, 38, 84
- Grains, cereal, 109, 157
- Grammar, 120, 178
  - generative, 120, 178
  - structural (descriptive), 120, 178
  - traditional, 120, 178
  - transformational, 120, 178
  - usage (functional), 120, 178
- Graphic arts, 129, 197
  - occupations, 143, 233
- Greenhouse operation and management, 109, 157
- Gross motor skills, 145, 240
- Ground operations, 142, 230
- Group
  - large, 55, 102
  - size of, for instruction, 55, 102
  - small, 55, 102
  - study activity, 28, 41, 94
  - work, 54, 102
- Group games, contests, and relays, 126, 192
- Grouping, 50, 80
  - basis for selection or, 37, 44, 50, 80
  - practices, 55, 103
  - practices in scheduling classes, 34, 76
  - selected, 37, 80
  - unselected, 37, 80
- Growth and development, 124, 189
- Guardians, 25, 74
- Guidance services, 27, 39, 91
  - career, 51, 89
  - in selection and use of materials, 39, 91
  - in selection of books and materials, 39, 91; 41, 94
  - inservice education on, 39, 91
  - program development for, 39, 91
  - referral for additional, 40, 92
- Guide
  - curriculum, 260
  - development of, in subject matter areas, 26, 77
- Guides, study, 53, 99
- Gymnasium, 52, 98
- Gymnastics, 147, 244
  - stunts, tumbling, and, 127, 192
- Gymnatorium, 52, 98

H

- Half-day session, 31, 68, 261
- Handball, 126, 192
- Handbook series, 1
- Handicap
  - auditory, 258
  - cultural, 259
  - defined, 261
  - emotional, 260
  - language, 262
  - mental, 262
  - physical, 263
  - social, 266
  - speech, 266
  - visual, 267
- Handicapped
  - culturally, 44, 81
  - multiple, 45, 83
  - physically, 45, 82
  - pupils, differentialized curriculum for, 145, 239
  - pupils, program of special education for, 43, 61
  - socially and/or emotionally, 45, 82
- Handwriting (penmanship), 120, 178
- Hard of hearing, 45, 82
- Hardware, building materials, farm and garden supplies and equipment, 117, 171
- Harmful substances, 124, 189
- Health, 124, 189
  - and welfare agencies, 28, 96
  - animal, 107, 154
  - appraisal, 27, 40, 92

Health—Continued
  careers, 124, 189
  community, 124, 189
  counseling for individual pupils, 27, 40, 92
  consumer, 124, 189
  dental, 124, 189
  environmental, 124, 187
  family, 127, 194
  international, 125, 190
  maintenance and care, 124, 189
  mental, 52, 89, 125, 189
  needs, adjusting programs to, 40, 92
  problems of pupils, communications to parents about, 40, 92
  related technology, 140, 227
  services, 40, 92
Health and Safety in Daily Living, Physical Education, and Recreation, 124, 188
Health Occupations Education, 123, 185
Hearing screening, 40, 92
Heat, 133, 211
Heating, 140, 225
Heavy equipment (construction), 142, 231
  maintenance, 142, 231
  operation, 142, 231
Helping teacher services, 28, 41, 95
Hematology, 123, 186
High school
  diploma, 38, 46, 85
  equivalency, 38, 46, 85
  postgraduate, 261
Hi-Y, 148, 246
Higher education, 261
Histology, 123, 186
Historical
  awareness and/or background, 51, 89
  geography, 138, 220
History, 138, 221
  American, 138, 221
  American Military, 149, 250
  and theory, art, 110, 159
  and traditions of the Marine Corps, 151, 254; 152, 255
  art, 110, 159
  local, 139, 221
  modern, 139, 221
  music literature and/or, 131, 208
  of economic thought, 138, 220
  of journalism, 121, 181
  of philosophy, 139, 221
  of the English language, 120, 179
  State, 139, 221
  theatre, 122, 182
  United States, 139, 221
  World, 139, 221
Hobbies, 127, 193
Hobby club, 148, 246
Hockey
  field, 127, 193
  ice, 127, 193
Holiday
  and vacation safety, 125, 190
  school, 265
Home
  and family background, 40, 92
  and/or hospital instruction, 54, 101
  economics, *see* Home economics, 127, 193
  economics-related technology, 141, 227
  economics, room, 52, 98
  equipment demonstrator, 141, 227
  health aide, 123, 186
  management, 127, 194
  mechanics, 129, 197
  of pupil, 42, 57, 97
  safety in the, 125, 190; 148, 248
  State, 137, 219
Home Economics, 127, 193
Homebound
  instruction, *see* Instruction for homebound pupil, 261
  pupil, 261
Home furnishings, 117, 171
  equipment, and services, 128, 195
  housing and, 127, 194
Homemaking
  equipment and supplies, 53, 100
  preparation for personal, home, and family living, 127, 194
Homeroom period, 32, 68
Home-school relations, 33, 72
Homework, 261
  help program, 41, 96
Honor
  award, 51, 86
  roll, 36, 80
Horizontal bars, 127, 192
Horse, side, 127, 192
Horticulture, ornamental, (production, processing, marketing, and services), 109, 157
Hospital, 42, 57, 97
  children's division assistant, 141, 227
  instruction, 54, 57, 101
Hotel and lodging, 117, 171
Hour, credit
  quarter, 35, 78
  semester, 35, 78
Housing and home furnishings, 127, 194
Human (cultural geography, 138, 220
  cartographic interpretation, 138, 220
  circulation patterns, 138, 220
  economic patterns, 138, 220
  political patterns, 138, 220
  population, 138, 220
  settlement patterns, 138, 220
Human
  factors of aviation and space, 151, 253
  relations, 119, 176
  relations, personal development and, 115, 167
Humanities, 261
  Art, 110, 159
  English Language Arts, 121, 180
  Foreign Languages, 123, 184
  Music, 132, 209
  Social Sciences/Social Studies, 139, 221
Hydrology, 134, 212
Hygiene, 151, 254
  and first aid, 149, 249
  dental, (associate degree), 123, 185; 141, 227

I

Ice
  hockey, 127, 193
  skating, 126, 192
Identification, 59–63
  numbers, 10, 21, 58, 106, 153
  of community needs and interests, 28, 41, 96
  of program of studies, 43, 59
  of pupils, 57, 83
  of school system, 21, 59
  of section or service, 56, 59
Illiterate, functionally, 44, 81
Illness
  and injury, 27, 92
  mental, 39, 86
Illustration
  technical, 128, 196
  technical and medical, 110, 160
Imitation, 54, 102
Improvement, speech, 121, 182
Immunization program, 27, 40, 92
Inability to speak language of instruction, 44, 81
Incidental meals and/or snacks, 41, 96
Income, national, 138, 220
Incomplete high school, 261
Independent of church,
  nonprofit, 30, 63
Independent study, 54, 101
Indians, American, 136, 218
Indirect pupil-teacher interaction, 54, 101

Individual
  aerospace opportunities for the, 151, 254
  and dual sports, 126, 192
  instruction, 55, 103
  schools, 28, 95
  self-testing events, 126, 191
  training for atomic warfare, 152, 255
  weapons, 149, 249
Individualization of instruction, 55, 103
Individualized reading, 120, 177
Industrial
  and product design, 110, 160
  arts, *see* Industrial Arts, 128, 195
  atomic energy occupations, 143, 234
  crafts, 128, 196
  design, 128, 196
  electrician, 143, 232
  electronics, 143, 232
  equipment and supplies, 53, 100
  facility, 57, 97
  marketing
    Business, 115, 167
    Distributive Education, 117, 170; 118, 174
  materials, 129, 198
  materials and processes, 129, 198
  processes, 129, 198
  technology, 140, 225
  uses of radioisotopes, 143, 234
Industrial Arts, 128, 195
  elementary school, 128, 197
  in the elementary school, 129, 197
  mathematics, 129, 197
  science
    (applied chemistry), 129, 197
    (applied physics), 129, 197
  student club, *see* Industrial Arts Student Club
Industrial Arts Student Club
  Cocurricular activities, 146, 243
  Industrial Arts, 195
Infantry, small unit tactics, 149, 250
  battalion, 149, 250
  company, 149, 250
  individual, 149, 250
  platoon, 149, 250
  squad, 149, 250
Information
  according to type of instructional program, 107
  avocational, 146, 242
  communication occupations, 135, 215
  coordination of, about individual schools, 28, 95
  educational, 39, 92
  item of, 262
  merchandise, 116, 168
  occupational, 39, 92
  personal and social, 39, 92
  product, 119, 176
  service, 39, 92
  services, 27, 28, 41, 92, 96
  vocational, 146, 242
Inhalation therapy, 124, 188
Initial Teaching Alphabet (ITA), 120, 178
Inorganic chemistry, 133, 211
Inquiry, skills of, 52, 90
In-school instruction, 54, 101, 261
Inservice education
  activities, direction of, 27, 94
  and supervision, 26, 77
  for instructional staff, 41, 94
  on guidance services, 39, 91
  on health services, 27, 40, 92
  provisions for, 27, 41, 94
  television program for, 28, 95
Installation
  drywall, 142, 231
  operation, and maintenance of reactors, 143, 233
Institute, 28, 94
  technical, 267
Institution, control by, 30, 63
Institutional and home management and supporting services, 128, 195
Instruction, 86
  assistance with development of skills and/or techniques of, 27, 94
  computer assisted, 259
  definition, 3
  for homebound pupil, 261
  homebound, *see* Instruction for homebound pupil, 261
  hospital, 261
  in use of library, 39, 91
  in-school, 54, 101, 261
  inability to speak language of, 44, 81
  individual, 55, 103, 261
  instrumental, *see* Instrumental instruction, 132, 209
    group, 132, 209
    individual, 132, 209
  location of, 42, 46, 57, 96–97
  medium of, 26, 34, 54, 78, 101
  methods of, 26, 34, 54, 57, 76, 101–102; 150, 250
  of section, 57, 87
  on a systemwide basis, 27, 86
  other procedures for, 55, 102–103
  out-of-school, 54, 101
  programmed, 54, 102
  provisions for individualization of, 55, 103
  services supporting, 25, 27, 34, 75, 90–96
  size of group for, 55, 102
  topic of, 267
  unit of, 267
  vocal, *see* Vocal instruction, 131, 208
    group, 131, 209
    individual, 131, 209
Instructional
  content, 25, 49, 74, 77
  equipment and supplies, 46, 53, 57, 99–100
  level, 261
    defined, 261
    elementary, 260
    postsecondary, 263
    secondary, 265
  materials center, 261
  outcomes planned, 46, 51, 57, 89–90
  processes, 26, 34, 35, 49, 76, 77
  program, *see* Instructional program
  resources, 25, 34, 75–76
  services, *see* Instructional services
  space, *see* Instructional space
  staff, *see* Instructional staff
  supervision services, 27, 41, 94
Instructional program
  articulation of elements of, 25, 34, 75
  aspects evaluated, 25, 34, 74
  background of, 24, 33, 44, 49, 71
  definition, 3
  information according to type of, 21
Instructional service
  contract for, 43, 63
  definition, 56
  factors evaluated in, 26, 35, 77
  items describing an, 55–56
  related to program of studies, 46, 104
Instructional space
  for section, 57
  for self-contained class, course, or cocurricular activity, 52, 97
  large group, 52, 97
  miscellaneous indoor, 52, 99
  miscellaneous outdoor, 52, 99
  regular, 52, 97
  small group, 52, 97
  special, 52, 97
  special, for exceptional children, 52, 98
Instructional staff, 25, 34, 75
  consultant services to, 39, 91
  for program of studies, 47, 104
  selection, acquisition, and preparation of materials for use by, 41, 94

Instructional staff—Continued
  services for, 25, 27, 41, 76, 93
  within school, 42, 104
  within school system, 29, 104
Instrument maintenance and repair occupations, 143, 234
  instruments (other than watches and clocks), 143, 234
  watchmaking and repair, 143, 234
Instrument, survey, 25, 74
Instrumental ensemble, 147, 245
Instrumental instruction, 132, 209
  group, 132, 209
  individual, 132, 209
Instrumental music, 131, 209
  band, 132, 209
    concert, 132, 209
    marching, 132, 209
    stage, 132, 209
  instrumental instruction, 132, 209
    group, 132, 209
    individual, 132, 209
  orchestra, 132, 209
    chamber, 132, 209
    full, 132, 209
    string, 132, 209
  small instrumental ensembles, 132, 209
Instrumentation, 129, 198
  and analytical methods, 134, 213
  technology, 140, 225
Insurance, 117, 171
  and risk, 114, 166
  casualty, 117, 175
  life, 114, 119, 166, 175
  principles of, 114, 119, 166, 175
  property, 119, 175
  property and casualty, 114, 166
Integrated, 46, 100
Integration, 261
Intellectual development, 38, 84
Intentions, educational and career, 33, 72
Interaction
  direct pupil-teacher, 54, 101
  indirect pupil-teacher, 54, 101
Interests, 55, 103
Interior
  decorating, 142, 230
  decorator assistant, 141, 227
  design, 110, 160
Intermediate
  accounting, 111, 162
  administrative unit, 21, 25, 59, 73
  algebra, 130, 202
  elementary grades, 261
  elementary level, 29, 60, 145, 238
  industrial arts program, 129, 197
International
  health, 125, 190
  marketing
    Business, 115, 167
    Distributive Education, 118, 173
  relations, 139, 222
  relations club, *see* International Relations Club
  space programs, 151, 253
  trade, 117, 171
International Relations Club, 146, 218, 243
Interpersonal and behavioral coping skills, 145, 240
Interpretation of outcomes, 25, 34, 74
Interpreting results of psychological testing, 40, 93
Interrelationships
  among areas of information about education, 15
  biological, 134, 212
  of subject matter with other selected aspects of curriculum
    and instruction, 13
Interscholastic athletics, 262
Interview, 25, 74
Interviewers and tests, technicians, 136, 216
Intramural athletics, 262
Intraschool and/or interschool activity, 50, 83
Introdction to
  aerospace education, 150, 252
  analysis, 131, 207
  area, 51, 88
  business, general business or, 114, 166
  data processing, 113, 165
  Marine Corps Junior Reserve Officer Corps, 151, 254
  philosophy, 139, 222
  research methods in area, 51, 88
  ROTC/NDCC and military organization, 149, 249
Inventories, 55, 103
Investments, 114, 166
Item of information, 262
  about curriculum and instruction:
  definition, 20
Items of information about subject-
  matter areas and cocurricular
  activities, classification of, 106

J

Jewelry, metalwork and, 110, 160
Journalism, 121, 181
  club, see Journalism club
  history of, 121, 181
Journalism club
  English Language Arts, 177
  Cocurricular Activities, 146, 243
Judgment
  critical, 51, 89
  development of, 148, 247
Judo, 150, 252
Junior
  high school level, 145, 239
  Hi-Y, 148, 246
  Tri-Hi-Y, 148, 246
Junior Achievement, Incorporated, 146, 243
Junior college, 29, 61
  definition, 61
  nonpublic, 29, 61
  public, 29, 61
  two-year branch, 30, 61
Junior high school, 29, 60
  program, typical local, 43, 61
Junior ROTC, 149, 248
  Air Force, 150, 252
  Army, 149, 248
  Marine Corps, 151, 254
  Navy, 150, 250
Junior-senior high school, 29, 60
Juvenile delinquent, 262

K

Key punch and coding equipment operators, 134, 214
Kindergarten, 30, 64, 262
  room, 52, 97
Kinetic molecular theory, 133, 211
Kinship systems, 137, 218
Knowledge and understanding in area, 51, 89

L

Labor
  economics, 114, 166
  management relations, 115, 167
Laboratory
  assistant, 148, 245
  curriculum, 27, 41, 94
  experience, 54, 102
  language, 262
  model, or practice school, 262
  room, 52, 97
  scientific, equipment and supplies, 53, 100
Lacrosse, 127, 193
Landscape architecture, 110, 160
Landscaping, 109, 157

Language
  correction, 145, 239
  development, 145, 239
  general, 122
  handicap, 262
  laboratory, 262
  of instruction, inability to speak, 44, 81
  skills, 120, 177
  stimulation, 145, 239
  study about, 120, 179
Languages, foreign, *see*
    Foreign Languages, 122, 183
  classical, *see* Classical languages, 122, 183
  modern foreign, *see* Modern foreign languages, 122, 183
Large group, 55, 102
Latin America, 137, 219
Laundering, 143, 233
Law
  business
    Business, 112, 164
    Distributive Education, 119, 176
  enforcement training, 144, 236
  liability, and responsibility, 148, 247
  real estate
  Business, 115, 167
    Distributive Education, 119, 175
Laws and ordinances of enforcement, 148, 207
Lay readers, 262
Layout, advertising, 118, 174
Leadership, 149, 150, 249, 252
  ability, 52, 89
  aerospace, 151, 253
  drill and exercise of command, 149, 249
  principles of, 149, 249
  psychology of, 149, 249
  use of pupil, 55, 103
Learning disabilities, pupils with, 45, 82
Learning resources center, *see*
  Instructional materials center
Leather, 128, 196
Leatherworking, 144, 237
Leave
  sabbatical, 28, 95
  without pay, 28, 95
Lecture, 28, 54, 94, 102
Legal
  exclusion, 38, 86
  management, financial and, 108, 156
Leisure, education for, 51, 89
Letter
  of commendation, 51, 86
  or note, 36, 80
Letters, 36, 79
Level, 26, 77
  intermediate elementary, 29, 60, 145, 238
  junior high school, 145, 239
  major segment of school, 26, 77
  middle school, 145, 238
  of ability required, 48, 56, 65
  of difficulty, 48, 56, 65
  of performance, 262
  preprimary, 29, 60; 144, 238
  primary, 29, 60; 145, 238
  reading, 265
  senior high school, 145, 239
  single school, 26, 77
  upper elementary, 29, 60; 145, 238
Levels
  of organization, 134, 213
  span of, 35, 77
Liberal arts mathematics, 131, 207
Library
  assistant, 148, 245
  books per pupil, 262
  instruction in use of, 39, 91
  school, *see* School library
  service to public, 28, 41, 96
  services, *see* School library services

Licensure, 185
Life
  insurance
    Business, 114, 166
    Distributive Education, 119, 175
  origins of, 132, 210
Lifesaving, 125, 191
Linear algebra, 130, 202
Lineman, 143, 232
Linguistics, 120, 178
List
  of learning experiences, 26, 78
  of resources for instructors, 26, 78
  of resources for pupils, 26, 78
  of teaching procedures, 26, 78
Listening, 54, 102; 120, 178
  materials and services for, 39, 41, 91, 94
Literacy, 52, 89
Literary club, 147, 243
Literature, 120, 179
  American, 120, 179
  Biblical, 120, 179
  biography, 120, 179
  children's, 121, 180
  classical, 120, 179
  drama, 121, 180
  dramatic, 122, 182
  English, 120, 179
  essay, 121, 180
  fiction, 121, 180
  for adolescents, 121, 180
  myth and legend, 121, 180
  oral interpretation of, 121, 182
  poetry, 121, 180
  world, 120, 179
Lithography, photography, and platemaking, 143, 233
Livestock and poultry, 107, 154
Local
  basic administrative unit, 262
  code, 48, 59
  community, 137, 219
  descriptive title, 43, 48, 56, 59
  education agency, 262
  history, 139, 221
  number or code, 43, 48, 59
  school system
    see Local school system, 21, 59
    see School system, 21
Local school system, 21, 59
  function and responsibility of, 8
  illustrative functions of, 7
  segment of, 22, 60
  see also School system, 21
Location, 59
  in given school, 57, 97
  in other school in same school system, 57, 97
  in school in other school system, 57, 97
  of instruction (or service), 10, 46, 52, 57
  of residence, 37, 83
  of school system, 21, 59
Lodging, hotel and, 117, 171
Logging (harvesting and transporting), 110, 158
Logic, 121, 180
Lowest and highest years, 30, 65
Lunchroom, 258

M

Machine
  and tool design, 140, 226
  bookkeeping, 112, 163
  operators: billing, bookkeeping, and computing, 134, 214
  shop, 143, 234
  shorthand, 116, 168
  tool operation, 143, 235
  transcription, 116, 169
Machinery, agricultural power and, 109, 156

Machines
  business, 113, 164
  business, first course, 113, 164
  business, second course, 113, 164
  calculating and listing, 113, 164
  duplicating, 113, 164
Machining, metal (metal shop), 129, 198
Magnetism, electricity and, 133, 211
Magnification
  stimulus (hearing), 145, 240
  stimulus (vision), 145, 240
Mail and postal clerks, 135, 215
Mail-preparing and mail-handling
  machine operators, 135, 216
Maintenance
  aircraft, 142, 229
  business machine, 142, 230
  heavy equipment (construction), 142, 231
  ship and boat operation and, 142, 230
Maintenance and care, health, 124, 189
Maintenance and interpretation of
  cumulative records of individual pupils, 40, 92
Major resource or plan, 21, 87
Major specialization
  area(s) of, 46, 88
  units of value required in, 45, 85
Maladjusted, socially, 266
Males, 37, 81
Management
  business organization and, 115, 167
  greenhouse operation and, 109, 157
  home, 127, 194
  marketing, (general), 118, 173
  merchandising, 115, 167
  nursery operation and, 109, 157
  personnel, 115, 167
  physical, 145, 241
  production, 107, 154
  real estate, 115, 167
  retail store, 116, 168
  sales, 119, 175
  small business, 115, 167
  soil, 109, 156
  turf, 109, 157
  water, 109, 158
Managerial accounting, 111, 162
Manipulative
  and tactile activity, 54, 102
  equipment and supplies, 53, 100
Manpower utilizatiom, 108, 155
Manual communication, 145, 240
Manufacturing, 129, 198
  shoe, 144, 237
Manuscript writing, 120, 178
Map
  and terrain analysis, 149, 250
  reading and use of the compass, 151, 255
Maple syrup, 110, 158
Maps
  and aerial photographs, 152, 256
  graphs, and/or charts, 53, 99
Marching band, 147, 244
Marine Corps Junior ROTC, 151, 254
Maritime occupations, 143, 234
Mark
  final, 261
  for course, 36, 44, 50, 79
  for section, 57, 79
  value, definition, 79
Mark-point average, 36, 44, 80
  courses included in, 36, 80
  definition, 80
Market analysis, 118, 174
Marketing, 115, 167
  agricultural, 118, 172
  distribution and, 170
  economics of, 119, 176
  industrial
    Business, 115, 167
    Distributive Education, 118, 172
Marketing—Continued
  international
    Business, 115, 167
    Distributive Education, 118,172
  management (general), 118, 173
  principles of
    Business, 115, 167
    Distributive Education, 118, 172
  purchasing and, 108, 156
  research, 118, 174
  trends, 118, 173
Marking scale, 36, 44, 50, 79
Marksmanship, 149, 151, 152, 250, 255, 256
Masonry, 142, 231
Mass media, speech through, 122, 182
Master schedule, 56
Materials
  and services, *see* Materials and services
  guidance in selection of, 39, 91
  industrial, 129, 198
  reading, 53, 99
  reference, 39, 91
  reproduced, 26, 78
  science, 133, 211
  self-teaching, 54, 101
Materials and services
  circulation, 41, 94
  for listening, 39, 41, 91, 94
  for viewing, 39, 41, 91, 94
Materials support occupations:
  transporting, storing, and recording, 135, 216
Mathematics, 130, 199
  applied, 130, 202
  business arithmetic or, 112, 163
  computer, 130, 203
  computer-oriented, 113, 165
  consumer, 130, 202
  elementary school (K-6), 130, 200
  first-year college, for elementary school teachers, 130, 203
  general, 131, 203
  industrial arts, 129, 197
  liberal arts, 131, 207
  merchandise, 118, 173
  (7th and 8th grades), 130, 200
  shop, 130, 202
Mathematics club
  Cocurricular Activities, 147, 243
  Mathematics, 199
Matter-energy exchange, 134, 213
Maturity, 38, 84
Means of reporting, 36, 44, 80
Measure, 262
  pupil unit of, 264
Measurement, 133, 211
Measures
  financial, 17
  general curriculum, 16
  involving curriculum and instruction, 16-17
  property, 17
  pupil, 16
  pupil-property, 17
  pupil-staff, 17
  staff, 17
Meat
  cutter, 144, 236
  fish, poultry, eggs, 109, 157
Mechanic, diesel, 143, 232
Mechanical
  drawing, 128, 196
  technology, 140, 226
Mechanics, 133, 211; 142, 229
  agricultural, 109, 156
  automotive, 129, 199
  farm, 108, 155
  home, 129, 197
  power, 129, 199
  power/automotive, 129, 198
  quantum, 133, 212
  skills, agricultural, 109, 156

Media
  advertising, 118, 174
  data collection, 25, 34, 72
  photography and related, 110, 160
Median age of pupils, 262
Medical
  assistant, 124, 188
  emergency technician, 124, 188
  laboratory technology, 123, 185
  status, 40, 92
Medical laboratory assisting
  Health Occupations Education, 123, 186
  Technical Education, 141, 227
Medium of instruction (or direction), 54, 101
Meetings, staff, 41, 94
Membership
  average daily, 258
  average, per school, 258
  excess, in public schools, 260
  pupil, 29, 42, 47, 55, 104
  reason for terminating, 38, 86
Mental
  handicap, 262
  health, 52, 89
  health professionals, qualified, 93
  illness, 39, 86
  retardation, 39, 86
  retardation aide, 124, 187
Mental health, 52, 89; 125, 189
  technician, 124, 187
  technology, 124, 187
Mentally
  deficient, *see* Mentally retarded
  gifted, 82
  retarded, *see* Mentally retarded
Mentally retarded, 45, 82
  educable, 45, 82
  moderately, *see* Educable mentally retarded
  severely, 45, 82
  trainable, 45, 82
Merchandise
  general, 117, 171
  information, 116, 168
  mathematics, 118, 173
Merchandising
  management, 115, 167
  retail
    Business, 116, 168
    Distributive Education, 118, 173
Messengers and office boys and girls, 135. 216
Metal
  machining (metal shop), 129, 198
  patternmaking, 144, 235
  sheet, 129, 198
  technology, 129, 198
  trades (combined), 143, 235
Metallurgical
  occupations, 144, 235
  technology, 140, 226
Metals, 129, 198
  art, 128, 196
Metalwork and jewelry, 110, 160
Metalworking occupations, 143, 234
Metaphysics, 139, 222
Meteorology, 133, 150, 211, 212, 251
Methods
  instrumentation and analytical, 134, 213
  military teaching, 149, 250
  of instruction, 26, 34, 54, 57, 76, 101-102;150, 250
  special communication, 145, 240
Microbiology, 132, 210
Microforms, 53, 99
  readers and reader-printers for, 53, 99
Middle East, 137, 219
Middle school, 29, 61
  level, 145, 238
  program, typical local, 43, 61
Midmanagement (general), 118, 173
Migrant
  children, 44, 81
  worker, 262
Military
  aerospace, 151, 253
  organization, 151, 254, 255
  organization in action, 151, 254
  service: opportunities, obligations, and benefits, 152, 256
  teaching methods, 152, 256
  training
    I, 151, 254
    II, 151, 255
    III, 152, 255
Millwork and cabinet making, 144, 238
Minimum qualifications for employment, 25, 75
Minor specialization
  area(s) of, 46, 88
  units of value required in, 45, 85
Minutes
  in class period, 32, 43, 49, 56, 69
  in module, 32, 69
  in school day, 31, 68
  in session, 32, 43, 69
  of instruction in session, 32, 43, 69
  per week, 49, 56, 70
  per week per unit of value, 35, 44, 50, 79
Miscellaneous
  health occupations education, 124, 187
  technical education, 141, 227
  times for class meetings, 56, 70
Mobile classroom, 262
Mobility/stability, 24, 34, 72
Mobility training, 145, 241
Model, 262
  school, 262
Modeling and imitation, 54, 102
Moderately mentally retarded, *see* Educable mentally
  retarded, 82
Modern foreign languages, *see* Foreign Languages,
  Modern Foreign Languages, 122, 183
Modern history, 139, 221
Module
  minutes in, 32, 69
  of time, 32, 69
Modules
  combination of class periods and, 32, 68
  number of, in typical daily sesstion, 33, 69
  number of, in typical week, 33, 69
  of time, 32, 43, 49, 68, 70
  per week per unit of value, 35, 44, 50, 78
  usual number of, per day for unit of value, 33, 49, 69
  variation in, 32, 69
Molecular biology 132, 210
Money and banking, 138, 220
Monogram, 51, 86
Month, school, 265
Monthly, 56, 70
Months
  calendar, in regular school term, 23, 67
  calendar, in summer school term, 24, 67
Moral and ethical values, 52, 89
Morale, 34, 72
  staff, 25, 75
Mortuary science, 124, 188
Motion, forces and, 134, 212
Motion pictures
  silent, 53, 99
  sound, 53, 100
Motor
  repairman, 143, 232
  vehicle, 148, 207
Motoric skills, 145, 240
Movable equipment, 26, 34, 76, 99
Movements, fundamental, 125, 191
Multigrade class, 262
Multigraded class, 262
Multiple-car range, 262

- Multiple
  - handicapped, 45, 83
  - periods, 43, 68
  - programs of studies, 42, 103
- Multipurpose room, 52, 98
- Music, 127, 131, 193, 208
  - club, 147, 208, 243
  - cocurricular activities, 147, 244
  - equipment and supplies, 53, 100
  - (general education,) 131, 208
  - humanities, 132, 209
  - instrumental
    - band, 132, 209
      - concert, 132, 209
      - marching, 132, 209
      - stage, 132, 209
    - instruction, 132, 209
      - group, 132, 209
      - individual, 132, 209
    - orchestra, 132, 209
      - chamber, 132, 209
      - full, 132, 209
      - string, 132, 209
    - small instrumental ensembles, 132, 209
  - literature and/or history, 131, 208
  - production, 147, 245
  - rhythm and body movement, 132, 209
  - room, 52, 98
  - theory, 131, 208
    - fundamentals, 131, 208
    - harmony, 131, 208
  - vocal, 131, 208
    - choir, chorus, and/or glee club, 131, 208
      - female, 131, 208
      - male, 131, 208
      - mixed, 131, 208
    - instruction, 131, 208
      - group, 131, 209
      - individual, 131, 209
    - small ensembles, 131, 209
- Myth and legend, 121, 180

N

- Name
  - of school, 29, 59
  - school system, 2l, 59
- Names of pupils, 57, 83
- Narrative writing, 121, 181
- Nation
  - Boys, 146, 243
  - Girls, 146, 243
- National
  - Honor Society (NEA), 147, 243
  - income, 138, 220
  - Junior Honor Society (NEA), 147, 243
  - Junior Red Cross, 148, 245
  - security, 151, 254
  - Student Traffic Safety Program, 148, 245
  - Thespian Society, 147, 243
- Natural Sciences, 132, 209
- Nature study, 132, 210
- Naval science
  - I, 150, 251
  - II, 150, 251
  - III, 150, 251
- Navigation
  - I, 150, 251
  - II, 150, 252
- Navigation, air, 151, 253
- Navy Junior ROTC, 150, 250
- Need
  - special pupil, 37, 45, 83
  - statement of, 26, 78
- Needs
  - of pupils, 24, 33, 72
  - of the school community, 33, 72
  - pupil, 34, 72
- Needy children, food program for, 40, 92
- Neighborhood, 137, 219
  - school, 262
- New developments, 149, 250
- Newspapers, 53, 99
- Noncourse activities, *see* Cocurricular activities
- Noncredit, 50, 79
  - course, 262
  - courses required, 46, 85
- Non-English speaking, 262
- Nonfood products, 109, 157
- Nongraded
  - class, *see* Ungraded class
  - school, *see* Ungraded school
- Nonpromotion, 38, 84
- Nonpublic
  - control, 22, 30, 63
  - junior college, 29, 61
  - school pupils, services for, 28, 41, 96
- Nonpublic schools, percentage of pupils in, 263
- Nonschool performance, 24, 33, 72
- Nontextiles, 119, 176
- Nonuniform class periods, 32, 43, 68
- Nonwestern civilization, 139, 221
- Normal range of pupils, 44, 81
- Note, 36, 80
- Nuclear
  - medical technology, 124, 187
  - science, 133, 211
  - technology, 140, 226
- Number
  - local, 29, 43, 48, 59
  - of pupil reports, 36, 79
  - room or space, 56, 59
  - section, 56, 59
  - standard, 29, 48, 59
  - standard school, 29
  - standard school system, 21
- Numbering of items in handbook, 10, 21, 58, 106
- Numbers, 36, 79
  - identification, 106, 153
  - pupil, 57, 83
- Numerical adequacy
  - of administrative staff of school, 34, 76
- Numerical control, 129, 198
- Nurse services, 27, 40, 92
- Nursery
  - operation and management, 109, 157
  - school, 263
- Nursing, 123, 186
  - assistance (aide), 123, 186
  - (associate degree)
    - Health Occupations Education, 123, 186
    - Technical Education, 141, 227
  - practical (vocational), 123, 186
- Nutrition
  - Agriculture, 107, 154
  - foods and, 124, 189
  - Natural Sciences, 132, 210
- Nuts, 110, 158

O

- Objectives
  - of the school, 33, 71
  - statement of aims and, 26, 78
- Observation, 25, 55, 74, 103
  - directed, 54, 101
- Obstetrical technician, 123, 186
- Occupational
  - competence, initial, 52, 89
  - competence, upgraded or updated, 52, 89
  - field, 263
  - goal of pupils, 46, 88
  - information, 39, 92
  - preparation, 128, 194
  - program, 43, 62; 50, 83
  - program of studies, 46, 88
  - retraining program, 46, 88
  - structure of school community, 33, 71

Occupational—Continued
  therapy, 123, 186
  training program, 46, 88
Occupations
  accounting and computing, 134, 213
  aviation, 142, 229
  business data processing systems, 134, 214
  commercial art, 142, 230
  commercial fishery, 142, 230
  commercial photograph, 142, 230
  drafting, 143, 232
  electrical, 143, 232
  electronics, 143, 232
  filing, office machines, and general office clerical, 135, 215
  graphic arts, 143, 233
  industrial atomic energy, 143, 233
  information communication, 135, 215
  instrument maintenance and repair, 143, 234
  maritime, 143, 234
  materials support: transporting, storing, and recording, 135, 216
  metallurgical, 144, 235
  metalworking, 143, 234
  office, 134, 213
  personnel, training, and related, 135, 216
  photographic and darkroom, 142, 231
  plastics, 144, 236
  printing press, 143, 233
  public service, 144, 236
  quantity food, 144, 236
  stationary energy sources, 144, 237
  stenographic, secretarial, and related, 136, 217
  supervisory and administrative management, 136, 217
  trade and industrial, 141, 228
  typing and related, 136, 217
  woodworking, 144, 238
Oceanographic technology, 141, 228
Oceanography. 133, 211
Office
  boys and girls, messengers and, 135, 216
  management and supervison, 115, 167
  managers and chief clerks, 136, 217
  Education Association
    Cocurricular Activities, 147, 243
    Office Occupations, 213
  practice, 115, 167
  work experience, 113, 164
Office Occupations, 134, 213
Office-related technology, 141, 227
Officer, class, 147, 245
Oilseeds, 109, 157
Olfactory
  development, 146, 242
  stimulation, 146, 242
On-the-job
  supervison, 54, 101
  training, 263
One-teacher school, 263
Operation
  machine tool, 143, 235
  other data processing and computer, 114, 166
  processing equipment, 113, 165
  tabulating equipment, 114, 165
Operations
  aircraft, 142, 230
  brazing and soldering, 143, 235
  ground, 142, 230
Operators
  computer and console, 134, 214
  duplicating machine, 135, 214
  key punch and coding equipment, 134, 214
  machine: billing, bookkeeping, and computing, 134, 214
  mail-preparing and mail-handling machines, 135, 216
  peripheral equipment, 134, 214
Ophthalmic,
  dispensing, 124, 187
Opinion
  community, 33, 72
  political parties and public, 139, 222
Optics, 133, 211
Optional items, 5, 20, 58
Optometrist assistant, 124, 187
Oral
  interpretation of literature, 121, 182
  reading, 120, 177
Orchestra, 132, 209
  chamber, 132, 209
  full, 132, 260
  string, 132, 209
Organic
  chemistry, 133, 211
  systems, 132, 210
Organization
  for curriculum improvement, 34, 49, 73
  departmentalized, 260
  for administration, 34, 76
  for evaluation and/or, 49, 73
  introduction to ROTC/NDCC and military, 149, 249
  levels of, 134, 213
  military, 151, 255
  of the Marine Corps, 152, 256
  of time segments in session, 31, 68
  social, 139, 223
  social, political, economic, 137, 218
  student, 266
Organizational arrangement
  adult education, 30, 61
  school, 29, 60
Organizations, farm, 108, 156
Orientation, 145, 241
  and sea power, 150, 251
  practices, 37, 45, 84
  training for professionals, 265
Orienteering, 126, 192
Origin, ethnic, 37, 81
Origins of life, 132, 210
Ornamental horticulture
  (production, processing, marketing, and services), 109, 157
Orthopedic assisting, 124, 188
Orthoptics, 124, 187
Orthotics, 123, 186
Other data processing and computer operation, 114, 166
Out-of-school instruction, 54, 101
Outcomes
  interpretation of, 34, 74
  planned instructional, 51, 57, 89–90
Outdoor
  education, 263
  recreation, 127, 193
  recreational activities, 126, 192
Outline
  of subject matter, 26, 78
  or list of learning experiences, 26, 78
  or list of teaching procedures, 26, 78
Overage, 38, 86
Overlapping sessions, 31, 68

P

Painting, 110, 160
  and decorating, 142, 231
Paleontology, 134, 213
Pamphlets and documents, 53, 99
Parallel bars, 127, 192
Parent conference, 36, 80
Parents, 44, 81
  and/or guardians, 25, 74
  communications to, about health problems of pupils, 27, 40, 92
  counseling with, 27, 39, 91
  educational level of, 33, 72
  participation of, in school activities and affairs, 33, 72
Parliamentary procedure, 121, 182
Part-time
  general continuation class, 263
  pupil, 263
  pupils, 37, 44, 80

Partially
  departmentalized session, 32, 43, 68
  seeing, 45, 82
Participation of parents in school activities and affairs, 32, 72
Passenger
  Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
  Safety and Driver Education, 149, 248
Pathology, plant, 108, 155
Patrol, student, 125, 148, 149, 190, 245, 248
Patternmaking, metal, 144, 235
Payment
  of expenses to professional meetings, 28, 95
  of fee, 45, 50, 83
  of tuition, 28, 37, 83, 95
Payroll
  accounting, 111, 162
  record keeping, 112, 163
Peasant societies, 137, 218
Pedestrian
  Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
  Safety and Driver Education, 149, 248
Penmanship, handwriting, 120, 178
People
  aerospace and the American, 151, 252
  prehistoric, 137, 218
Peoples, primitive, 137, 218
Pep band, 147, 244
Percentage
  of attendance, 263
  of exceptional children in special classes or schools, 263
  of high school graduates who completed courses in given subject areas, 263
  of pupils currently enrolled in courses in given subject areas, 263
  of pupils in nonpublic schools, 263
  of pupils making normal progress, 263
  of pupils not promoted (or retained), 263
  of pupils participating in various activities, 263
  of pupils promoted, 263
  of total excess public school membership, 263
  of total membership being provided appropriate special education, 263
Percentages, 36, 79
Perceptual skills, 146, 241
Performance
  in assignment, 25, 75
  level of, 262
  nonschool, 24, 33, 72
  or achievement in schoolwork, 38, 46, 51, 85
  postschool, 24, 33, 72
  records, 108, 155
  school, 24, 33, 40, 72, 92
Performing arts, 127, 193
  design for the, 110, 159
Period
  activity and/or assembly, 32, 69
  assembly, 32, 69
  class, 32, 69
  homeroom, 32, 68
  number, 56, 70
  promotion, 38, 84
  single, 32, 43, 68
  single class, 49, 70
Periodic
  physical examinations, 40, 92
  properties, 133, 211
Periods
  combination single and multiple, 32, 68
  multiple, 32, 68
Periodicals, 53, 99
Peripheral equipment operators, 134, 214
Permanent building, 263
Personal
  and social counseling, 39, 91
  and social development, 40, 92
  and social information, 39, 92
  development and human relations, 115, 167

Personal—Continued
  finance, 115, 167
  grooming and body care, 124, 189
  responsibility in unsupervised activities, 125, 190
    Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
    Safety and Driver Education, 148, 248
  safety, 145, 241
  satisfaction, 52, 89
  services
    Distributive Education, 117, 171
    Trade and Industrial Occupations, 144, 235
  spatial relationships, 146, 242
  typewriting, 117, 169
  shorthand, 116, 168
Personality
  and culture, 137, 218
  characteristics, 55, 103
Personnel
  assistants, 136, 216
  management
    Business, 115, 167
    Distributive Education, 118, 173
  training, and related occupations, 135, 216
Persons or groups involved in evaluation and/or curriculum improvement, 34, 73
Persuasion, 121, 182
Persuasive writing, 121, 181
Petroleum, 117, 171
  technology, 140, 226
Phenomena
  cellular (cytology), 132, 210
  solution, 133, 212
  wave, 133, 212
Philosophy, 139, 221
  history of, 139, 221
  introduction to, 139, 222
  of religion, 139, 222
  of the school, 33, 71
  of the school system, 24, 33, 71
  statement of, 26, 78
Phonemics, 120, 178
Phonetics, 120, 178
Phonology, 120, 178
Photoengraving, 143, 233
Photographer, school newspaper, 148, 245
Photographic laboratory and darkroom occupations, 142, 231
Photographs, maps and aerial, 152, 256
Photography, 129, 197
  and related media, 110, 160
  club, 147, 243
Photolithography, 129, 197
Phrases, standard, 36, 79
Physical
  and medical status, 40, 92
  anthropology, 137, 219
  chemistry, 133, 211
  condition, 39, 86
  development, 55, 103
  education, 125, 191
  education and recreation, safety in, 125, 190
  education equipment and supplies, 53, 100
  examinations, periodic, 40, 92
  fitness, 124, 189
  fitness and health, 52, 89
  geography, 134, 213
    atmosphere, 138, 220
    biosphere, 138, 220
    exosphere, 138, 220
    hydrosphere, 138, 220
    lithosphere, 138, 220
  handicap, 261
  management, 145, 241
  recreation, 127, 193
  sciences, 133, 211
  therapy, 123, 186
Physically handicapped, 45, 82
Physics, 133, 211
  solid state, 133, 212

Physiology
  Agriculture, 107, 154
  Natural Sciences, 133, 210
Picture sets and study prints, 53, 99
Pipefitting, plumbing and, 142, 231
Placement, 56, 63–65
  grade, 56, 64
  of class, course, or cocurricular activity, 48
  school, 24, 33, 72
  services, 27, 92
  services, educational 40, 92
  services, occupational, 40, 92
  year, 56, 65
Plan
  free loan, 39, 91
  purchase, 39, 91
  rental, 39, 91
  State, 266
  State vocational education, 266
Plane geometry, 131, 206
  and solid geometry, 131, 206
Planned instructional outcomes for pupils, 46, 51, 57, 89–90
Planning, 27, 94
  and production clerks, 135, 216
  for curriculum improvement, 26, 77
  pupil participation in, 55, 103
  school-community, 33, 72
  urban, 110, 160
Plans, combination of, 39, 91
Plant
  combined community college and secondary school, 258
  combined elementary and secondary school, 258
  disease and pest control, 108, 155
  pathology, 108, 155
  power, 142, 230
  school, 265
  science
    Agriculture, 108, 154
    Technical Education, 140, 227
Plants
  electric power generating, 144, 237
  pumping, 144, 237
Plastering, 142, 231
Plastic occupations, 144, 236
Plastics, 129, 198
  tecnology, 129, 198
Platemaking, lithography, photography, and, 143, 233
Play production, 122, 182
Playwriting, 122, 182
Plumbing and pipefitting, 142, 231
Poetry, 121, 180
Points, 51, 86
Police (law enforcement and corrections) science technology, 141, 228
Policies, school system, 24, 33, 71
Policy, statement of, 26, 78
Political
  parties and public opinion, 139, 222
  science, 139, 222
  socialization, 139, 222
  theory, 139, 222
Polo, water, 127, 193
Population, composition of, 33, 71
Portable building, 263
Portion of regular school term for unit of value, 35, 79
Position of course or class in sequence, 48, 65
Post high school level, *see* Postsecondary instructional level, 263
Poster and display club, 148, 245
Postgraduate, high school, 261
Postgraduate studies, provisions for, 43, 61
Postschool performance, 24, 33, 72
Postsecondary instructional level, 263
Posture education, 126, 191
Pottery and ceramics, 110, 160
Poultry
  livestock and, 107, 154
  see also Meat, fish, poultry, eggs, 109, 157
Power
  and machinery, agricultural, 109, 156
  fluid, 129, 198
  mechanics, 129, 199
  orientation and sea, 150, 251
  plant, 142, 230
Power/automotive mechanics, 129, 198
Practical (vocational) nursing, 123, 186
Practice, 54, 102
  application, or content enrichment, 51, 88
  clerical, 113, 164
  office, 115, 167
  school, 262
  secretarial, 116, 169
  specialized secretarial, 117, 169
    legal, 117, 169
    medical, 117, 169
    scientific/technical, 117, 169
Practices, real estate, 119, 175
Pregnant girls, 44, 81
Prehistoric people, 137, 219
Prekindergarten, 30, 64
  age, 44, 81
  class, 263
Preparation
  occupational, 128, 194
  of staff, 25, 75
  specialized vocational, 146, 242
Preparing
  class lists, 28, 96
  report cards, 28, 96
Preprimary level, 29, 60; 144, 238
  teacher's assistant at the, 141, 227
Preprimary school, 263
Prerequisite, 264
Prevention and control of communicable diseases, 40, 92
Prevocational
  education, 264
  work experience, 146, 242
Primary
  grades, 264
  level, 29, 60; 145, 238
  school, 264
  unit, ungraded, 267
Primitive
  behavior, 137, 219
  peoples, 137, 219
Principal
  medium of instruction (or direction), 54, 101
  methods of instruction (or direction), 54, 101–102
Principle, 264
Principles
  accounting, 111, 161
  advertising
    Business, 112, 162
    Distributive Education, 118, 174
  business, 114, 167
  business and management, 114, 166
  of economics
    Business, 114, 166
    Social Sciences/Social Studies, 138, 220
  of insurance
    Business, 114, 166
    Distributive Education, 119, 175
  of leadership, 149, 249
  of marketing
    Business, 115, 167
    Distributive Education, 118, 172
  of real estate, 115, 167
  real estate, 119, 175
  salesmanship, 116, 168
  understanding of basic, 52, 90
Printing 129, 197
  silk screen making and, 143, 233
Printing press occupations, 143, 233
Printmaking, 110, 160
Private or nonpublic school, 264
Probability and statistics, 131, 207
Probation, 23, 31, 38, 66, 86

Probationary promotion, 38, 84
Problem solving, 54, 102
Problems
  of the school community, 33, 72
  social, 139, 223
Procedures
  evaluation, 25, 55, 74, 103
  for instruction (or direction), 55, 102–103
  parliamentary, 121, 182
Processes
  industrial, 129, 198
  industrial materials and, 129, 198
  instructional, 26, 34, 35, 76
Processing
  equipment operation, 113, 165
  scientific data, 140, 226
Product
  design, 142, 230
  information, 119, 176
Production, 140, 226
  advertising, 119, 174
  agricultural, 107, 154
  committee, 24, 73
  management, 107, 154
  music, 147, 245
  play, 122, 182
  services, 39, 91
  typewriting, 117, 169
Products
  agricultural, 109, 157
  dairy, 109, 157
  food, 109, 157
  nonfood, 109, 157
  special, 110, 158
Professional
  association, 43, 66
  educational staff per 1,000 pupils in average daily membership, 264
  meetings, payment of expenses to, 28, 95
Program
  adult education, 257
  apprenticeship, 46, 88
  basal reader, 120, 177
  college preparatory, 43, 50, 61, 83
  development for guidance services, 39, 91
  developmental reading, 120, 177
  duration of time in, 46, 85
  enrichment, 260
  food for needy children, 40, 92
  general education, 43, 50, 61, 83
  immunization, 40, 93
  intermediate industrial arts, 129, 197
  National Student Traffic Safety, 148, 245
  occupational, 43, 50, 62, 83
  occupational retraining, 46, 88
  occupational training, 46, 88
  of special education for handicapped pupils, 43, 61
  of studies, *see* Program of studies
  rehabilitation, 43, 62
  supplementary, 266
  technical, 46, 88
  transfer, 43, 50, 62, 83
  tutoring and homework help, 41, 96
  typical local elementary, 43, 61
  typical local junior high school, 43, 61
  typical local middle school, 43, 61
Program of studies
  aspects of evaluation of, 44, 74
  cocurricular activities related to, 47, 105
  completion of, 45, 84
  courses in, 47, 105
  courses offered in, 46, 88
  definition, 42
  enrollment in given, 50, 83
  identification of, 43, 59
  illustrative items describing a, 10
  instructional equipment and supplies for, 46, 99–100
  instructional services related to, 46, 104
  instructional staff members for, 47, 104
Program of studies—Continued
  items describing a, 42–47
  pupil membership in courses and cocurricular activities of, 47, 104
  pupils served by, 44, 80–83
  recognition for completion of, 46, 85
  requirements for successful completion of, 45, 84
  single, 42, 103
  structure of, 42, 46, 100
  subject matter of, 46, 87
  type of, 42, 43, 61–62, 103
  type of occupational, 46, 88
Programmed instruction, 54, 102
Programmed materials, written, 53, 99
Programmer, computer, 141, 227
Programmers, 135, 214
Programming, computer, 113, 165
Programs
  government, 108, 156
  international space, 151, 253
Programs of education in custodial and detention care, 28, 96
Programs of studies
  of school, 42, 103
  multiple, 42, 103
  within school system, 29, 103
Progress
  and promotion practices, 84
  and promotion practices of school, 37
  pupil, evaluating and reporting, 35, 78
  variable, 38, 84
Project, 54, 102
  committee, 28, 94
Projectionist, 147, 245
Projectors
  opaque, 53, 99
  overhead, 53, 99
Promoting a healthful school environment, 40, 92
Promotion
  accelerated, 38, 84
  advertising and sales
    Business, 111, 162
    Distributive Education, 118, 174
  basis for, 38, 84
  continuous, 38, 84
  or advancement, 51, 86
  period, 38, 84
  practice, 38, 84
  practices, of school, 38, 84
  probationary, 38, 84
  regular, 38, 84
  retail sales, 119, 174
  to next school, 38, 85
Properties, periodic, 133, 211
Property
  and casualty insurance, 114, 166
  insurance, 119, 175
Proprietary, 22, 63
Propulsion
  space technology, 151, 253
  systems for aircraft, 151, 253
Prosthetics, 123, 186
Provision for inservice education, 27, 94
Provision of care of emergency illness and injury, 40, 92
Provisions
  for curriculum improvement, 34, 73
  for free selection, 43, 62
  for improving teaching, 34, 73
  for inservice education, 41, 94
  for postgraduate studies, 43, 61
  for supplies, 27, 39, 91
  for textbooks, 27, 34, 39, 76, 91
Psychiatric
  aide, 123, 186
  services, 27, 40, 92
Psychological
  counseling, 40, 93
  testing, interpreting results of, 40, 93
  tests, administering, 40, 93
Psychologist, recommendation of, 37, 45, 83

Psychology, 139, 222
  business, 113, 164
  cultural, 137, 218
  developmental, 139, 222
  educational, 139, 222
  general, 139, 222
  of adjustment, 139, 222
  of leadership, 149, 247
  social, 139, 222
Psychotherapy, 40, 93
Public
  address, rhetoric, and, 121, 181
  control, 22, 30, 62
  junior college, 29, 61
  library service to, 41, 96
  opinion and political sociology, 139, 223
  school, 264
  service occupations, 144, 236
  speaking, 121, 181
Pumping plants, 144, 237
Punch card data processing, 114, 165
Punctuation, 120, 178
Pupil
  appraisal services, 27, 39, 92
  background, 37, 44, 81
  capacity of a school plant, 264
  definition, 3
  full-time, 261
  group, characteristics of, 24, 33, 72
  health records, 40, 92
  home of, 42, 57, 97
  homebound, 261
  leadership, 55, 103
  membership, 29, 42, 47, 55, 104
  morale, 34, 72
  need, special, 37, 45, 83
  needs, 24, 34, 72
  numbers, 57, 83
  part-time, 263
  participation in planning, 55, 103
  personnel services, 25, 37, 39, 75, 91
  progress, evaluating and reporting, 35, 44, 49, 57, 78–80
  reports, 36, 79
  self-evaluation, 55, 103
  station, 97
  transportation services, 41, 96
  unit of measure, 264
Pupil-teacher interaction, 54, 101
Pupils, 25, 74
  adjusting programs to health needs of individual, 40, 92
  assistance in understanding, 27, 94
  assistance with individual, 39, 91
  characteristics and needs of, 24, 33, 72
  communications to parents about health problems of, 40, 92
  counseling with, 27, 91
  exceptional, 260
  full-time, 37, 44, 80
  full-time equivalency of, 37, 44, 80
  health counseling for individual, 40, 92
  identification of, 57, 83
  maintenance and interpretation of cumulative records of individual, 40, 92
  median age of, 262
  names of, 57, 83
  normal range of, 44, 81
  number of, 50, 57, 80
  number served, 37, 44, 80
  occupational goal of, 46, 88
  part-time, 37, 44, 80
  per acre, 264
  planned instructional outcomes for, 46, 51, 57, 89–90
  receiving service, 57, 80–83
  referral of, for further diagnosis or treatment, 40, 93
  resource services for, 25, 27, 39, 75, 90
  scheduled into section, 57, 80–83
  selection, acquisition, and preparation of materials for use by, 39, 91
  served, 37, 44, 50, 80–83
  sex of, 37, 44, 80

Pupils—Continued
  underachieving, 44, 81
  with learning disabilities, 45, 82
  with special physical health problems, 45, 82
Purchase plan, 39, 91
Purchasing, 119, 175
  and marketing, 108, 156
Pyramids, building, 127, 192

Q

Qualifications, minimum, for employment, 25, 75
Qualitative analysis, 133, 211
Quality
  control clerks, 135, 216
  evaluation of, 17–18
Quantitative analysis, 133, 211
Quantity food occupations, 144, 236
Quantum mechanics, 133, 212
Quarter credit hour, 35, 78, 264
Quarters, 23, 31, 66, 67
Quill and Scroll, 147, 243

R

Race, 37, 81; 137, 218; 137, 219
Radar, 150, 251
Radiation therapy, 124, 187
Radio, 53, 54, 99, 101
  and television,122, 182
Radio/television, 143, 232
Radiography, 143, 234
Radioisotopes, industrial uses of, 143, 234
Radiologic, 124, 187
  technology (X-ray)
    Health Occupations Education, 124, 187
    Technical Education, 141, 227
Radiological health technician, 124, 187
Range, 109, 158
  multiple-car, 262
Reactions, chemical, 133, 211
Reactors, installation, operation, and maintenance of, 143, 233
Readers
  and reader-printers for microforms, 53, 99
  lay, 262
Readers' theatre, 121, 182
Readiness, 52, 89
  reading, 120, 177
Reading, 54, 102; 120, 177
  beginning, 120, 177
  blueprint, 142, 230
  individualized, 120, 177
  level, 265
  materials, 53, 99
  oral, 120, 178
  readiness, 120, 177
  remedial, 120, 177
  speech (lip reading), 145, 240
Real estate
  appraisal
    Business, 115, 167
    Distributive Education, 119, 175
  Business, 116, 168
  Distributive Education, 117, 171
  finance
    Business, 117, 171
    Distributive Education, 117, 171
  law
    Business, 115, 167
    Distributive Education, 119, 175
  management
    Business, 115, 167
    Distributive Education, 119, 175
  practices, 119, 175
  principles, 119, 175
  principles of, 115, 167
  sales
    Business, 116, 168
    Distribute Education, 119, 176
Reason for terminating membership, 38, 86

Receptionists and information clerks, 135, 216
Recitation, 54, 102
Recognition
  for completion, 46, 51, 85
  for graduation, 38, 85
  no, 38, 46, 85
  no special, 51, 86
Recommendation
  of psychologist, 37, 45, 50, 83
  of teachers, counselor, and/or principal, 37, 45, 50, 83
Recommended
  items, 5, 20, 58
  transfer, 38, 86
Record, 265
  keeping, payroll, 112, 163
  player, 53, 99
Recordings, 54, 101
Records
  performance, 108, 155
  pupil health, 40, 92
Recreation, 127, 193
  agencies, 28, 96
  Agriculture, 109, 110, 158
  and tourism, 117, 171
  Health and Safety in Daily Living, Physical Education, and Recreation, 127, 193
  outdoor, 127, 193
  physical, 127, 193
Red Cross, National Junior, 148, 245
Reeducation, self-concept, 145, 240
Reference
  books, 53, 99
  material and services, 39, 91; 41, 94
  skills, 120, 178
References, cross-, 110
Referral
  for additional guidance services, 27, 40, 92
  for diagnosis or treatment, 27, 40, 92
  for further clinical diagnosis or treatment, 40, 93
Refresher and orientation training for professionals, 265
Refrigeration, 140, 225
Regional accrediting association, 25, 31, 43, 66, 74
Regional geography, 138, 220
  agricultural regions, 138, 220
  climatic regions, 138, 220
  continental regions, 138, 220
  culture regions, 138, 220
  landform regions, 138, 220
  manufacturing regions, 138, 220
  political regions, 138, 220
  population (human) regions, 138, 220
  vegetation regions, 138, 220
Regions of the United States, 137, 219
  Midwest, 137, 219
  North Central, 137, 219
  Northeast, 137, 219
  Northwest, 137, 219
  Southeast, 137, 219
  Southwest, 137, 219
Registration, 185
Regular
  class, 265
  classroom, 52, 97
  4-year high school, *see* Four-year high school, 60
  meals, 41, 96
  promotion, 38, 84
  school term, *see* Regular school term
Regular school term, 23, 26, 31, 36, 67, 77, 79
  calendar months in, 23, 31, 67
  days in session in, 23, 31, 67
  definition, 67
  division of, 23, 31, 67
  equivalent weeks in, 23, 31, 67
  portion of, for unit of value, 35, 44, 79
Rehabilitation, 52, 89; 123, 186
  programs, 43, 62
Relations
  family, 127, 194
  home-school, 33, 72
Relations—Continued
  human, 119, 176
  international, 139, 222
  labor and management, 115, 167
  pupil–staff, 34, 73
  school–community, 33, 72
  school system–community, 24, 72
Relationships
  business–government, 118, 176
  personal spatial, 146, 242
Relays, group games, contests, and, 126, 192
Released time, 265
Religion, 37, 81; 139, 223
Religious group, 22, 30, 63
Remedial reading, 120, 177
Remediation, 52, 89
Rental plan, 39, 91
Repair
  appliance, 142, 229
  shoe, 144, 237
  small engine, 144, 237
Repairman, motor, 143, 232
Report, 265
  card, 36, 80
  cards, preparing, 28, 96
  writing
    Business, 112, 163
    Distributive Education, 119, 177
Reporting, 121, 181
  means of, 36, 44, 50, 57, 80
  period, 265
  pupil progress, 35, 44, 49, 57, 78–80
  unit, 265
Reports, number of pupil, 36, 79
Representatives of community, 25, 74
Reproduced materials, content of, 26, 35, 78
Reproduction, 133, 210
  electronic, 145; 240
Required
  courses, 46, 88
  for all pupils, 50, 83
  for all pupils in area of specialization within program, 50, 84
  for pupils in specified programs of studies, 50, 83
  or elective, 50, 83
Requirement
  for entrance, 45, 83
  for graduation, 38, 84
  for successful completion of self-contained class or course, 51, 84
Research
  activity, assistance with, 27, 94
  aerospace industry and, 151, 253
  and development, 129, 199
  and statistical services, 28, 41, 95
  applied, 28, 95
  basic, 28, 95
  marketing, 118, 174
  methods in area, introduction to, 51, 88
  services, 28, 95
Residence, location of, 37, 83
Residential school, 30, 61
  for special education, 265
Resource
  center, 265
  economics, 138, 219
  services for pupils, 25, 27, 39, 75, 90
  unit, 265
  utilization, 26, 35, 49, 77
Resources
  agricultural (conservation, utilization, and services), 109, 158
  community, 26, 28, 34, 42, 76, 96
  instructional, 25, 34, 75
Responsibility, law, liability, and, 148, 247
Retail
  advertising, 119, 174
  buying, 118, 173
  display
    Business, 116, 168
    Distributive Education, 119, 174

- Retail—Continued
  - merchandising
    - Business, 116, 168
    - Distributive Education, 118, 173
  - sales promotion, 119, 174
  - salesmanship, 116, 168
  - selling, 119, 175
  - store management
    - Business, 116, 168
    - Distributive Education, 118, 173
  - trends, 118, 173
- Retailing
  - Business, 116, 168
  - Distributive Education, 118, 173
- Retardation, mental, 39, 86
- Retraining for new ocupation, 46, 48
- Review, C.P.A., 111, 162
- Rhetoric, 121, 181
  - and public address, 121, 181
- Rhythm and body movement, 132, 209
- Rhythms, 126, 192
- Riding, 126, 192
- Riflery, 147, 244
- Rings, 127, 192
- Risk, insurance and, 114, 166
- Roadway technology, 140, 225
- Roofing, 142, 231
- Room
  - audio-visual, 52, 98
  - home economics, 52, 98
  - kindergarten, 52, 97
  - laboratory, 52, 97
  - multipurpose, 52, 98
  - music, 52, 98
  - number, 56, 59
  - shop, 52, 98
- Ropes, 127, 192
- ROTC, Junior, 149, 248
  - Air Force, 150, 252
  - Army, 149, 248
  - Marine Corps, 151, 254
  - Navy, 150, 250
- Rules and regulations of school, 33, 71
- Rural society, 139, 223

S

- Sabbatical leave, 28, 95
- Safety
  - consciousness, 52, 90
  - education, 148, 247
  - fire, 125, 190
  - holiday and vacation, 125, 190
  - in daily living, 125, 190
  - in physical education and recreation, 125, 190
  - in the home
    - Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
  - personal, 116, 168
  - school, 125, 190
  - traffic, 125, 190; 149, 248
  - vocational and occupational, 125, 190
  - water, 125, 191
- Safety and Driver Education, 148, 246
- Salaries, 26, 34, 76
- Salary schedule, 26, 76
- Sales
  - direct, 119, 175
  - management, 119, 175
  - promotion, advertising, and
    - Business, 111, 162
    - Distributive Education, 118, 174
  - real estate
    - Business, 115, 167
    - Distributive Education, 119, 176
- Salesmanship, 119, 175
  - principles, 116, 168
  - retail, 116, 168
- Sanitarian assistant, 124, 187
- Sanitation technology, 140, 225
- Satisfaction, personal, 52, 89
- Scale
  - marking, 36, 44, 50, 79
  - two-word, 36, 79
- Schedule
  - master, 56
  - time, 49, 66
- Scheduling, 56
  - classes, 28, 34, 76, 96
  - cycle, 260, 265
  - flexible, 261
  - pupils and staff into classes and services, 34, 76
- Scholastic aptitude, 24, 33, 72
- School
  - accreditation and/or approval of, 30, 65
  - adult, 258
  - aims and objectives of, 33, 71
  - and/or public service cocurricular activities, 147, 245
  - area, 30, 61
  - area vocational, 258
  - attendance services, 27, 41, 93
  - business, 258
  - cocurricular activities provided by, 42, 105
  - community, *see* School community, 33, 71–72
  - comprehensive high, 259
  - control of, 30, 62
  - courses offered by, 42, 104
  - day, *see* School day
  - definition, 29
  - district, 265
  - elementary, 29, 60
  - entrance into, 37, 83
  - environment, 27, 40, 92
  - evaluation and curriculum improvement of, 33, 71
  - facility, 42, 97–99
  - five- or six-year high, 29, 60
  - for exceptional children, 265
  - four-year high, 29, 60
  - geographical location of, 29, 59
  - graded, 261
  - health aide, 123, 186
  - holiday, 265
  - identification of, 29, 59
  - illustrative functions of, 7
  - illustrative items describing an individual, 9
  - incomplete high, 261
  - instructional staff, members within, 25, 42, 75, 104
  - items describing a, 29–42
  - junior high, 29, 60
  - junior–senior high, 29, 60
  - laboratory, model, or practice, 262
  - library, 52, 98
  - library services, 27, 39, 41, 52, 90, 93, 98
  - local number or code, 29, 59
  - middle, 29, 60
  - month, 265
  - name of, 29, 59
  - neighborhood, 262
  - newspaper photographer, 148, 245
  - nongraded, *see* Ungraded school
  - nonpublic, 264
  - nursery, 263
  - objectives of, 33, 71
  - one-teacher, 263
  - organizational arrangement, 29, 60
  - performance, 24, 33, 72
  - philosophy of, 33, 71
  - placement, 24, 33, 72
  - plant, 265
  - preprimary, 263
  - primary, 264
  - private, 264
  - programs of studies of, 42, 103
  - promotion to next, 46, 85
  - psychological services, 27, 93
  - public, 264

School—Continued
  pupil membership in programs of studies, courses, and cocurricular activities of, 42, 104
  residential, 30, 61
  rules and regulations of, 33, 71
  safety
    Health and Safety in Daily Living, Physical Education and Recreation, 124, 188
    Safety and Driver Education, 148, 246
  secondary, 29, 60
  senior high, 29, 60
  service club, 148, 245
  services supporting instruction, 29, 39, 90, 103
  social work services, 27, 41, 93
  span of ages, grades, and/or years in, 30, 63
  special, *see* School for exceptional children
  standard number or code, 29, 59
  summer, *see* Summer school term, 67
  system, *see* School system
  technical, 30, 61
  technical high, *see* Vocational and/or technical high, 267
  term, 265
  term, regular, 36, 79
  term, summer, 36, 79
  time schedule, 31, 66
  undivided high, *see* Five- or six-year high school, 29, 60
  ungraded, 267
  ungraded elementary, 267
  ungraded high, 267
  visit, 28, 95
  vocational and/or technical, 30, 61
  vocational and/or technical high, 267
  year, 23, 31, 66
School community
  characteristics of, 33, 71
  needs, 33, 72
  occupational structure of, 33, 71
  problems of, 33, 72
School–community
  planning, 33, 72
  relations, 33, 72
School day, 31, 67
  definition, 67
  extended, 260
  minutes in, 31, 68
  sessions in, 31, 68
School system
  aims of, 24, 71
  approval of, 23, 65
  community relations, 24, 72
  control of, 22, 62
  definition, 21
  facilities within, 29, 103
  identification of, 21, 59
  instructional staff members within, 29, 104
  items describing a, 9, 21–29
  local, *see* Local school system
  location, 21, 59
  name, 21, 59
  philosophy of, 24, 71
  policies, 24, 71
  programs of studies within, 29, 103
  pupil membership within, 29, 104
  school services supporting instruction within, 29, 103
  schools in, 29, 103
  services supporting instruction, 27, 90
  span of ages and grades in, 22, 63
  time schedule, 23, 66
Schools
  autonomous, 22, 63
  coordination of information about individual, 28, 95
  in school system, 29, 103
Schoolwork
  achievement in, 37, 45, 50, 83
  completion of, 259
  general performance or achievement in, 38, 46, 51, 85
Science
  adventures in, 150, 251
  animal, 107, 154
Science—Continued
  general earth-space, 133, 212
  general (including elementary school), 132, 210
  general physical, 133, 211
  industrial arts, 129, 197
  materials, 133, 211
  mortuary, 124, 188
  Naval I, 150, 251
  Naval II, 150, 251
  Naval III, 150, 251
  nuclear, 133, 211
  plant, 108, 154; 140, 227
  political, 139, 222
  soil, 134, 213
Science club, 147, 209, 243
Science Fair, International, 147, 243
Sciences
  biological, 132, 210
  earth space, 133, 212
  physical, 133, 211
  social, 136, 218
Scientific
  data processing, 140, 226
  laboratory equipment and supplies, 53, 100
Scope
  of central administration, 22, 63
  of content, 26, 35, 72
  of curriculum improvement activity, 26, 77
  of instructional content, 34, 75
Screening
  dental, 40, 92
  hearing, 40, 92
  vision, 40, 92
Screens, projection, 53, 91
Sculpture, 111, 160
Seamanship, 142, 230; 150, 251
Secondary
  instructional level, 265
  school, 29, 60
Secretarial
  accounting, 111, 162
  practice, 116, 169
  shorthand, stenographic and, 116, 168
Secretaries, 136, 217
Secretary, executive, 136, 217
Section
  definition, 55
  entrance into, 57, 83
  items describing a, 12, 55–57
  mark value for, 57, 79
  number or code, 56, 59
Sections of self-contained class, course, or cocurricular activity, 55, 105
Security
  elements of national
    Part I, 151, 254
    Part II, 151, 254
  national, 151, 254
Seeds, 108, 156
Seeing, partially, 45, 82
Segment of local school system, 22, 60
Selection
  of books and materials, guidance in, 39, 41, 91, 94
  or grouping, basis of, 44, 50, 80
Selection, acquisition, and preparation of materials
  for pupils, 39, 91
  for use by instructional staff, 41, 94
  for use by pupils, 39, 91
Self-concept
  development, 145, 240
  reeducation, 145, 240
Self-contained class, 32, 43, 68
  definition, 47, 62
  illustrative descriptions of, 11
  items describing a, 10, 47–55
  specifications for, 48, 59
  subject matter for, 51, 87
Self-evaluation, pupil, 55, 103
Self-help skills, 145, 241

Self-teaching materials, 54, 101
Self-testing events, individual, 126, 191
Self-understanding, 52, 90
Selling, retail, 119, 175
Semantics, general, 121, 181
  (semology), 120, 179
Semester
  credit hour, 35, 78, 265
  defined, 265
Semesters, 31, 67
Semiannually, 56, 70
Seminar, 54, 102
(Semology), semantics, 120, 179
Senior high school, 29, 60
Separate subjects, 46, 54, 100
Sequence, 265
  number of courses or classes in, 48, 65
Sequential study, 265
Service
  activity, illustrative items describing a, 12
  activity, instructional, 55–57
  consultant, to staff members, 39, 91
  financial aid, 40, 92
  frequency of, 56, 70
  industries, 129, 199
  instructional, 56
  library, to public, 41, 96
  location of, 57, 96
  military: opportunities, obligations, and benefits, 149, 250
  provided, nature of, 35, 77
  to others, experience in, 51, 89
  voluntary, 127, 193
Services
  advertising, 117, 170
  attendance, 27, 41, 93
  audiology, 27, 40, 93
  audiovisual, 27, 39, 41, 91, 94
  automotive 142, 229
  circulation, 39, 41, 91, 94
  clothing management, production, and, 128, 195
  community, 28, 41, 96
  contracted, 259
  custodial, 142, 231
  data processing, 28, 41, 95
  dental, 27, 40, 92
  educational placement, 40, 92
  evaluation, 28, 95
  fabric maintenance, 143, 233
  financial aid, 27, 92
  followup and evaluation, 40, 92
  food, 28, 41, 96; 117, 171
  food management, production, and, 128, 195
  for instructional staff, 25, 27, 41, 76, 93
  for listening, 39, 41, 91, 94
  for nonpublic school pupils, 28, 41, 96
  for pupils, resource, 39, 90
  for viewing, 39, 41, 91, 94
  guidance, 27, 39, 91
  health, 27, 40, 92
  helping teacher, 28, 41, 95
  home furnishings, equipment, and, 128, 195
  information, 27, 28, 39, 92, 96
  institutional and home management and supporting,
  instructional supervision, 27, 41, 94
  library, 27, 41, 90, 93
  nurse, 27, 40, 92
  occupational placement, 40, 92
  personal, 117, 171; 144, 235
  placement, 27, 40, 92
  production, 39, 41, 91, 94
  provided, nature of, 26, 77
  psychiatric, 27, 40, 92
  psychological, 40, 93
  pupil appraisal, 27, 39, 92
  pupil personnel, 25, 27, 39, 75, 91
  pupil transportation, 28, 41, 96
  research, 28, 95
  research and statistical, 28, 41, 95
  school attendance, 27, 93
  school attendance and social work, 41, 93
Services—continued
  school library, 27, 39, 41, 90, 93
  school psychological, 27, 40, 93
  school social work, 27, 41, 93
  shared, 265
  social work, 27, 93
  speech pathology, 27, 40, 93
  statistical, 28, 95
  supporting instruction, 25, 27, 34, 39, 75, 90
  transportation, 28, 96
Session
  curtailed, 31, 68
  daily, 31, 68
  definition, 68
  entire, 32, 43, 49, 68, 70
  full-day, 31, 68
  half-day, 31, 68, 261
  minutes in, 32, 43, 69
  minutes of instruction in, 32, 43, 69
  number of class periods in typical daily, 32, 43, 69
  number of modules in typical daily, 33, 69
  organization of time segments in, 31, 43, 68
  partially departmentalized, 32, 43, 68
  single, 31, 68
Sessions
  double, 31, 68
  extended-day, 260
  in school day, 31, 68
  staggered, *see* Extended-day sessions, 260
  three or more overlapping, 31, 68
  two overlapping, 31, 68
Severely mentally retarded, 45, 82
Sex education, family life education, including, 124, 189
Sex of pupils, 37, 44, 55, 80, 103
Shared
  facilities, 265
  services, 265
  time, *see* Dual enrollment, 260
Sheet metal
  Industrial Arts, 129, 198
  Trade and Industrial Occupations, 143, 235
Sheltered workshop, 266
Ship and boat operation and maintenance, 142, 230
Shipping and receiving clerks, 135, 216
Shoe
  manufacturing, 144, 237
  repair, 144, 237
Shop
  machine, 143, 234
  mathematics, 130, 202
  room, 52, 98
Shopwork, 54, 102
Shorthand
  dictation, 116, 168
  machine, 116, 168
  personal use, 116, 168
  speedbuilding, 116, 168
  stenographic, and secretarial, 116, 168
  theory
    first course, 116, 168
    second course, 116, 168
  transcription, 116, 168
Showcard techniques, 119, 174
Side horse, 127, 192
Silk screen making and printing, 143, 233
Simulation, 54, 102
  driving experience, 148, 247
Single
  period, 43, 68
  program or multiple programs of studies, 42, 103
  teacher, 54, 101
  term, 31, 67
Six-year high school, 29, 60
Size of group for instruction, 55, 102
Skating, ice, 126, 192
Skills, 266
  agricultural mechanics, 109, 156
  associated with area, 52, 90
  communication, 145, 239

Skills—Continued
  dexterity, 145, 240
  dictionary, 120, 178
  driving, 148, 247
  fine motor, 145, 240
  gross motor, 145, 240
  interpersonal and behavioral coping, 145, 240
  language, 120, 177
  motoric, 145, 240
  of inquiry, 52, 90
  perceptual, 146, 241
  reference, 120, 178
  self-help, 145, 241
Skin and scuba diving, 125, 191
Slow learners, 44, 81
Small
  areas, 137, 219
  business management
    Business, 115, 167
    Distributive Education, 118, 174
  crafts, 125, 191
  engine repair, 144, 237
  group, 55, 102
  instrumental ensembles, 132, 209
  vocal ensembles, 131, 209
Small unit infantry tactics, 151, 255
Small unit tactics: infantry, 149, 250; 152, 256
  battalion, 149, 250
  company, 149, 250
  individual, 149, 250
  platoon, 149, 250
  squad, 149, 250
Snowskiing, 126, 192; 147, 244
Soccer, 127, 193; 147, 244
Social, 145, 240
  adeptness, 52, 90
  cocurricular activities, 148, 246
  development, 40, 92
  handicap, 261
  information, 39, 92
  maturity, 38, 84
  organization, 139, 223
  political, economic organization, 137, 218
  problems, 139, 223
  psychology, 139, 222
  sciences, 136, 218
  stratification, 139, 223
  studies, 136, 218,
  studies club, 147, 243
  theory, 139, 223
  work services, 27, 41, 93
Social Sciences/Social Studies, 136, 218
Socialization, 52, 90; 139, 223
  political, 139, 222
Socially
  and/or emotionally handicapped, 45, 82
  maladjusted, 266
Societies
  folk, 137, 218
  peasant, 137, 218
Society
  National Honor (NEA), 147, 243
  National Junior Honor (NEA), 147, 243
  National Thespian, 147, 243
  rural, 139, 223
  urban, 139, 223
Socioeconomic background, 37, 81
Sociology, 139, 223
  public opinion and political, 139, 223
Softball, 127, 193; 147, 244
Soil, 109, 158
  management, 109, 156
  science, 134, 213
Soils, 108, 155
Solid geometry, 131, 207
Solid state physics, 133, 212
Solution phenomena, 133, 212
Sonar, 150, 251
Sound, 133, 212
Source or recipient of contract, 43, 63
Soviet, 137, 219
Space
  and the universe, 151, 252
  exploration, 133, 212
  exploration: manned and unmanned flight, 151, 253
  human factors of aviation and, 151, 253
  instructional, *see* Instructional space
  number, 56, 59
  technology/propulsion, 151, 253
Spacecraft and launch vehicles, 151, 252
Span
  of ages, grades, and/or years, 22, 30, 63
  of levels, grades, and years, 26, 35, 77
  of permissive attendance ages, 30, 64
Speaking, public, 121, 181
Special
  class for exceptional pupils, 266
  communication methods, 145, 240
  education, 43, 61, 266
  education, residential school for, 265
  physical health problems, 45, 82
  products, 110, 158
  pupil ability, aptitude, or interest, 37, 50, 83
  pupil need, 37, 50, 83
  school, *see* School for exceptional children, 265
  youth project, 266
Specialists, educational assistants and training, 135, 216
Specialization, 46, 87
  area of, 42, 103
  area(s) of major, 46, 88
  area(s) of minor, 46, 88
Specialized
  secretarial practice, 117, 169
    legal, 117, 169
    medical, 117, 169
    scientific/technical, 117, 169
  shorthand terminology and transcription, 116, 169
    legal, 116, 169
    medical, 116, 169
    scientific/technical, 117, 169
  vocational preparation, 146, 242
Specifications for section or service, 56, 58–59
Speech, 121, 181
  choral, 121, 182
  club, 147, 244
  correction, 145, 239
  criticism, 121, 182
  development, 145, 239
  effective store, 119, 176
  handicap, 261
  impaired, 45, 82
  improvement, 121, 182
  pathology and auditory services, 27, 40, 93
  reading (lip reading), 145, 240
  stimulation, 145, 239
  through mass media, 122, 182
Speed-a-way, 127, 193
Speedball, 127, 193
Speedbuilding, shorthand, 116, 168
Spelling, 120, 178
  and vocabulary building, 112, 163
Spiral curriculum, 266
Sports, team, 127, 193
Stability, 24, 34, 72
Staff
  central administrative, 25, 73
  central instructional, 25, 73
  characteristics of, 26, 34, 35, 77
  instructional, 25, 34, 75
  meetings, 28, 41, 94
  members, *see* Staff members
  morale, 25, 75
  numerical adequacy of administrative, 25, 34, 76
  ratio, 264
  scheduling of, 25, 76
  school instructional, 25, 73
  services for instructional, 25, 76

Staff members, 52, 57, 90
  consultant service to, 27, 39, 91
  for self-contained class, course, or cocurricular activity, 55, 104
  working with other, 40, 93
Staffing, numerical adequacy of, 25, 75
Staggered sessions, *see* Extended-day sessions, 260
Stamp club, 148, 246
Standard
  code, 48, 59
  descriptive title, 43, 48, 59
  number or code, 48, 59
  school number or code, 29, 59
  words or phrases, 36, 79
Standardized
  achievement tests, 55, 103
  test, 25, 74
  test results, 40, 92
Standing, grade or year, 45, 83
State
  agency, other, 23, 66
  department of education, 21, 23, 31, 43, 59, 66
  education agency, 8, 25, 74
  education agency, other, 21, 59
  history, 139, 221
  home, 137, 219
  plan, 266
  vocational education plan, 266
Statement
  of aims and objectives, 26, 78
  of need, 26, 78
  of philosophy, 26, 78
  of policy, 26, 78
Stationary energy sources occupations, 144, 237
Statistical services, 28, 41, 95
Statistics
  algebra and, 130, 201; 204, 205
  business, 113, 164
  probability and, 131, 207
Status
  accreditation, 31, 66
  approval, 30, 49, 66
  certification, 25, 75
Steering committee, 24, 73
Stenographers, 136, 217
Stenographic, secretarial, and related occupations, 136, 217
Stimulation
  auditory training, 146, 241
  language, 145, 239
  olfactory, 146, 241
  speech, 145, 239
  tactile and kinesthetic, 146, 241
  visual, 146, 242
Stimulus magnification
  (hearing), 145, 240
  (vision), 145, 240
Stock and inventory clerks, 135, 216
Stoichiometry, 133, 212
Stratification, social, 139, 223
Structural
  grammar (descriptive), 120, 178
  technology, 140, 225
Structure
  atomic and molecular, 133, 211
  of course, 54, 100
  of program of studies, 42, 100
  of program of studies or course, 100–101
Structures and conveniences, agricultural
  Agriculture, 109, 156
  Technical Education, 140, 224
Student
  body activities, 266
  council, 148, 245
  Nurses Association, 147, 244
  organization, 266
Student—Continued
  patrol, 148, 245
    Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
    Safety and Driver Education, 149, 248
  union and/or student activity center, 148, 245
Studies
  area (multidisciplinary), 137, 219
  social, 136, 218
Studio, art, 110, 159
Study
  about language, 120, 179
  carrel, 52, 99
  followup, 261
  guides, 53, 99
  hall, 52, 98
  in depth, 51, 88
  independent, 54, 101
  nature, 132, 210
  sequential, 265
Stunts, tumbling, and gymnastics, 127, 192
Subject, 266
Subject matter
  areas, *see* Subject-matter areas
  for course, 51, 87
  for self-contained class, 51, 87
  of program of studies, 46, 87
  outline of, 26, 78
Subject-matter areas, 25, 26, 75, 78;106, 153; 266
  correlated, 46, 100
  development of guide in, 26, 77
  discrete, 46, 100
Subjects, separate, 46, 100
Substances, harmful, 124, 189
Sucessful completion of entrance examination or other test, 37, 83
Summary information, 103-105
  cocurricular activities provided by school, 42, 105
  courses offered by school, 42, 104
  facilities within school system, 29, 103
  instructional staff members within school, 42, 104
  instructional staff members within school system, 29, 104
  programs of studies of school, 42, 103
  programs of studies within school system, 29, 103
  pupil membership in programs of studies, courses, and cocurricular activities of school, 42, 104
  pupil membership within school system, 29, 104
  school services supporting instruction within school system, 29, 103
    schools in school system, 29, 103
Summer school, *see* Summer school term
Summer school term, 23, 66
  calendar months in, 31, 67
  calendar weeks in, 31, 67
  days in session, 31, 67
Supervision, 26, 77
  employee, 119, 176
  instructional, 41, 94
  office management and, 115, 167
  on-the-job, 54, 101
Supervisor, food service, 124, 188; 141, 227
Supervisors, clerical and office, 136, 217
Supervisory and administrative management occupations, 136, 217
Supplementary program, 266
Supplies, 26, 34, 76
  and services, agricultural, 108, 156
  provisions for, 27, 39, 91
  see also Equipment and supplies
Supply, 99
Surfing, 125, 191; 126, 192
Surgical technician, 123, 186
Survey
  instrument, 25, 74
  of area, 51, 88
Survival, 150, 252
Suspension, 38, 86
Swimming, 125, 191
  synchronized, 125, 191

Synchronized swimming, 125, 191
Syrup, maple, 110, 158
Systems
  accounting, 111, 161
  analyst technology, 144, 227
  analysts, 135, 215
  comparative, 139, 222
  data processing, 113, 165;134, 214
  kinship, 137, 218
  organic, 132, 210
Systemwide basis, instruction on, 27, 86

T

Tabulating
  equipment operation, 114, 165
  machine wiring, 114, 165
Tactics, small unit infantry, 149, 250; 151, 255; 152, 256
Tactile
  activity, 54, 102
  and kinesthetic development, 146, 241
  and kinesthetic stimulation, 146, 241
Tailoring, 144, 237
Talented, 45, 82
Tape
  recorder, 53, 99
  recorder, video, 53, 100
Tax accounting, 111, 162
Taxonomy, 133, 210
Teacher
  aide, 266
  assigned, 57, 90
  classroom, 258
  crisis, 259
  definition, 101, 266
  diagnostic, 266
  for portions of schoolwork of self-contained class, 52,90
  single, 54, 101
Teacher-made tests, 55, 103
Teacher-pupil ratios, 264, 266
Teachers
  or other staff members assigned, 52, 90
  team of, 54, 101
Teacher's assistant at the preprimary level,
Teaching
  definition, 267
  machine, 267
  provisions for improving, 24, 34, 73
  team, 267
Team
  of teachers, 54, 101
  sports, 127, 193
  teaching, 267
Technical
  and medical illustration, 110, 160
  and/or business association, 43, 66
  education, 140, 223
  high school, *see* Vocational and/or technical high school, 267
  illustration, 128, 196
  institute, 267
  institute, two-year, 30, 61
  program, 46, 88
  school, 30, 61
  theatre and design, 122, 182
Technician
  central supply, 124, 188
  electrocardiograph, 124, 188
  electroencephalograph, 124, 187
  interviewers and tests, 136, 216
  medical emergency, 124, 188
  mental health, 124, 187
  obstetrical, 123, 186
  radiological health, 124, 187
  surgical, 123, 186
Techniques
  evaluation, 119, 176
  showcard, 119, 174
Technological applications, 133, 212
Technology
  aeronautical, 140, 224
  agricultural, 140, 224
  agricultural electrification, 109, 156; 140, 224
  agricultural machinery and equipment, 140, 224
  agricultural-related, 140, 226
  architectural, 140, 224
  automotive, 140, 224
  chemical, 140, 224
  civil, 140, 224
  dairy, 140, 226
  dental laboratory, 123, 185
  drafting, 128, 196; 143, 232
  electrical, 140, 225
  electromechanical, 140, 225
  electronic, 140, 225
  engineering-related, 140, 224
  environmental-control, 140, 225
  fire and fire safety, 141, 227
  food processing, 140, 227
  forestry, 141, 228
  health-related, 140, 227
  home economics-related, 141, 227
  industrial, 140, 225
  instrumentation, 140, 225
  mechanical, 140, 226
  medical laboratory, 123, 185
  mental health, 124, 187
  metal, 121, 198
  metallurgical, 140, 226
  nuclear, 140, 226
  nuclear medical, 124, 187
  oceanographic, 141, 228
  office-related, 141, 227
  petroleum, 140, 226
  plastics, 121, 198
  police (law enforcement and corrections)science, 141, 228
  radiologic(X-ray), 124, 187
  roadway, 140, 225
  sanitation, 140, 225
  structural, 140, 225
  systems analyst, 141, 227
  woods, 129, 199
Telecourse, 267
Telelecture equipment, 53, 100
Telephone, 54, 101
Television
  cameras, 53, 100
  program for inservice education, 28, 95
  radio and, 122, 182
  receiving sets, 53, 100
Television/radio, 143, 232
Tellers, 134, 214
Tennis, 126, 192; 147, 244
Term, 23, 26, 31, 36, 67, 77, 79
  regular school, *see* Regular school term
  school, 265
  segment of, 26, 77
  single, 31, 67
  summer school, *see* Summer school term
Terminating membership, reason for, 38, 86
Termination practices
  of school, 38, 84
  other, 38, 86
Terminology used for unit of value, 44, 78
Test
  results, standardized, 40, 92
  scoring and reporting, 28, 96
  standardized, 25, 74
  standardized achievement, 55, 103
  teacher-made, 55, 103
  teacher-made objective, 25, 74
Testing, 54, 102
  tuberculosis, 40, 92
Textbooks, 53, 99
  provisions for, 26, 27, 34, 39, 76, 91
Textile production and fabrication, 144, 237

Textiles
  Art, 110, 160
  clothing and, 127, 194
  Distributive Education, 119, 176
  Industrial Arts, 128, 196
Theatre
  criticism, 122, 182
  history, 122, 182
  readers, 121, 182
Theory, 121, 180
  art, 110, 159
  communication, 121, 182
  kinetic and molecular, 133, 211
  music, 131, 208
    fundamentals, 131, 208
    harmony, 131, 208
  of aircraft flight, 151, 252
  political, 139, 222
  social 139, 223
Therapy
  inhalation, 124, 188
  occupational, 123, 186
  physical, 123, 186
  radiation, 124, 187
Thermodynamics, 133, 212
Thinking, cognitive, 51, 89
Three-dimensional and manipulative equipment and supplies, 53, 100
Three-dimensional design, 110, 159
Time
  block of, 49, 70
  duration of, 38, 46, 85
  duration of, in course or class, 51, 85
  elements, 66-68
  in class, 38, 84
  module of, 32, 43, 44, 49, 68-70
  of day, 49, 70
  released, 265
  schedule, 23, 31, 43, 49, 66-71
  segment for class or course, 49, 56, 70
  segments in daily session, 43, 68
  shared, 266
  variable amounts of, 49, 70
Title
  local descriptive, 43, 48, 56, 59
  standard descriptive, 43, 48, 56, 59
Tobacco, 109, 157
Tool and die making, 143, 235
Topic of instruction, 267
Tourism, recreation and, 117, 171
Track and field, 126, 192; 147, 244
Trade and Industrial Occupations, 141, 228
Trade, international, 117, 171
Trades
  construction and maintenance, 142, 231
  metal (combined), 143, 235
Traditional grammar, 120, 178
Traffic
  accidents, 148, 247
  citizenship, 148, 247
  rate, and transportation clerks, 135, 216
  safety
    Health and Safety in Daily Living, Physical Education and Recreation, 124, 188
    Safety and Driver Education, 149, 248
Trainable mentally retarded, 45, 82
Training
  apprenticeship, 258
  commercial pilot, 141, 227
  cooperative on-the-job, 259
  definition, 267
  employee, 119, 176
  fireman, 144, 236
  law enforcement, 144, 236
  Military I, 151, 254
  Military II, 151, 255
  Military III, 152, 255
  mobility, 145, 241
  on-the-job, 263
Trampoline, 127, 192
Transcript, 267
Transcription
  machine, 116, 169
  specialized shorthand terminology and, 116, 169
      legal, 116, 169
      medical, 116, 169
  scientific/technical, 117, 169
Transfer
  program, 43, 50, 62, 83
  recommended, 38, 86
Transformational (grammar), 120, 178
Transmission, cultural, 137, 218
Transparency maker, 53, 99
Transportation
  Distributive Education, 117, 172
  Industrial Arts, 129, 199
  services, 41, 86
Travel, 145, 241
Treatment of content, 88, 31, 66, 67
Trees, Christmas, 110, 158
Trends
  fashion, 118, 173
  marketing, 118, 173
  retail, 118, 173
Trigonometry, 131, 208
Tri-Hi-Y, 148, 246
Trimesters, 23,
Trip, field, 54, 102
Tuberculosis testing, 40, 92
Tuition, 267
  payment of 28, 37, 83, 95
Turf management, 109, 157
Tutoring, 54, 101
  and homework help program, 41, 96
Twirlers(baton), 147, 244
Two-dimensional design, 110, 159
Two-word scale, 36, 79
Two-year
  branch college, 30, 61
  technical institute, 30, 61
Type of instructional program
  information according to, 107
Typesetting, composition, makeup, and, 143, 233
Typewriting, 117, 169
  first course, 117, 169
  personal, 117, 169
  production, 117, 169
  second course, 117, 169
Typical
  local elementary program, 43, 61
  local junior high school program, 43, 61
  local middle school program, 43, 61
Typing
  and related occupations, 136, 217
  for communication, 145, 240
Typists, 136, 218
  clerk, 136, 217

U

Underachieving pupils, 44, 81
Underage, 38, 86
Understanding of basic principles, 52, 90
Undivided high school, *see* Five- or six-year high school, 60
Ungraded, 30, 64
  class, 267
  elementary school, 267
  high school, 267
  primary unit, 267
  school, 267
Uniform class periods, 32, 43, 68
Uniform high school diploma, 38, 85
Uniformitarianism, 134, 213
Unit, 35, 78
  accomplishment, 35, 78
  of instruction, 267
  of value, *see* Unit of value *and* Units of value

Unit of value, 35, 44, 49, 78
  class periods or modules per week per unit, 35, 44, 50, 78
  minutes per week per, 35, 44, 50, 79
  portion of regular school term for, 35, 44, 79
  terminology used for, 35, 44, 50, 78
  usual number of modules per day for, 33, 49, 69
United States
  areas beyond the, 137, 219
  defense of the, 151, 253
  history, 139, 221
  regions of the, 137, 219
Units, core, 46, 54, 100
Units of value
  awarding of, 51, 85
  completion of a minimum number of, 38, 45, 85
  variations in, 36, 44, 50, 79
Universe, space and the, 121, 252
Upgrading in current occupation, 46, 88
Upholstering, 144, 237
Upper
  elementary grades, 267
  elementary level, 29, 60; 145, 238
Urban
  planning, 110, 160
  society, 139, 223
Usage (functional grammar), 120, 178
Use
  of data collection findings, 25, 34, 74
  of devices and equipment, 145, 241
Utilization
  manpower, 108, 155
  resource, 26, 77
  wood, 110, 158

V

Value, unit of, *see* Unit of value
Values
  cultural, 137, 218
  moral and ethical, 52, 89
Variable progress, 38, 84
Variation in modules, 32, 69
Variations in units of value, 36, 44, 79
Vegetables, fruits and, 109, 157
Vehicle, 267
  motor, 148, 247
Vehicles, spacecraft and launch, 151, 252
Ventilating (filtering and humidification), 142, 229
Video tape recorder, 53, 100
Viewing, materials and services for, 39, 41, 91, 94
Vision screening, 40, 92
Visit, school, 28, 95
Visual
  correction, 146, 242
  development, 146, 242
  equipment and supplies, 53, 99
  handicap, 267
  stimulation, 146, 242
Vocabulary building, spelling and, 112, 163
Vocal ensemble, 147, 245
Vocal instruction, 131, 208
  group, 131, 209
  individual, 131, 209
Vocal music, 131, 208
  choir, chorus, and/or glee club, 131, 208
    female, 131, 208
    male, 131, 208
    mixed, 131, 208
  small vocal ensembles, 131, 209
  vocal instruction, 131, 208
    group, 131, 209
    individual, 131, 209
Vocational
  and avocational skills development, 146, 242
  and occupational safety
    Health and Safety in Daily Living, Physical Education, and Recreation, 125, 190
    Safety and Driver Education, 149, 248
  and/or technical high school, 267
  and/or technical school, 30, 61
  course, 48, 62
  information, 146, 242
  school, area, 258
Vocational Industrial Clubs of America
  Cocurricular Activities, 147, 244
  Trade and Industrial Occupations, 228
Voice and diction, 120, 178; 121, 182
Voice of Democracy, 147, 244
Volleyball, 127, 193; 147, 244
Voluntary service, 127, 193

W

Waiter/waitress, 144, 236
Waitress/waiter, 144, 236
Warfare, individual training for atomic, 152, 255
Warning or probation, 23, 31, 66
Watchmaking and repair, 143, 234
Water, 109, 158
  games, 125, 191
  management, 109, 156
  polo, 127, 193
  safety, 125, 191
Waterskiing, 125, 191
Wave phenomena, 133, 212
Weapons, 149, 249; 151, 255; 152, 256
  crew-served, 149, 249
  individual, 149, 249
Weather, 151, 252
Week
  number of class periods in typical, 32, 44, 69
  number of modules in typical, 33, 69
  minutes per, 49, 56, 70
Weekly, 56, 70
Weeks
  calendar, in summer school term, 24, 67
  equivalent, in regular school term, 23, 67
  number of, 49, 56, 70
Welding, 129, 198
  and cutting, 143, 235
  combination, 143, 235
  electric, 143, 235
  gas, 143, 235
Western civilization, 139, 221
Wholesaling, 118, 173
Wildlife—including game farms and hunting areas, 109, 158
Window display, 142, 230
Wiring, tabulating machine, 114, 165
Wood utilization, 110, 158
Woods, 129, 199
  technology, 129, 199
Woodworking occupations, 144, 238
Wool, 109, 157
Words, standard, 36, 79
Work
  experience, office, 113, 164
  extension, 260
  group, 54, 102
Workbooks, 53, 99
Worker, migrant, 262
Working with other staff members, 40, 93
Workshop, 24, 28, 41, 73, 94
  sheltered, 266
World
  civilization, 139, 221
  history, 139, 221
  literature, 120, 179
Wrestling, 126, 192
Writing, 121, 181
  braille reading and, 145, 240
  creative, 121, 181
  cursive, 120, 178
  editorial, 121, 181
  expository, 121, 181
  feature, 121, 181
  manuscript, 120, 178
  narrative, 121, 181
  persuasive, 121, 181
  report, 112, 162; 119, 177

X

(X-ray), radiologic technology, 124, 187; 141, 227

Y

Year, 26, 30, 64, 65, 70, 77
  and term, 56, 70
  placement, 56, 65
  school, 23, 31, 66
  standing, 37, 45, 50, 83
Years
  lowest and highest, 30, 65
  span of, 35, 77
Years or grades
  early elementary, 144, 238
Years or grades—Continued
  general elementary, 144, 238
  general secondary, 145, 239
  junior high school, 145, 239
Young Farmers Association, 147, 244
Y. M. C. A. , 148, 246
Y-Teens, 148, 246
Y. W. C. A. , 148, 246
Youth
  project, special 266
  under 18, employed, 44, 81

Z

Zoology, 132, 210

☆ U.S. GOVERNMENT PRINTING OFFICE: O—355-007

Educators, public officials, and members of the general public have been expressing increased interest in the appraisal and evaluation of education throughout the United States. To be most meaningful, such appraisal and evaluation require that items of information reported from the various local school systems, States, and regions be comparable. The universal use of this handbook—and of the other handbooks in the State Educational Records and Reports Series—will give major assistance to making such comparability a reality.

This handbook identifies and defines or describes those items of information about curriculum and instruction which should be available on a comparable basis throughout the United States. It provides some guidelines for developing information systems based upon these items. The publication of this or any other handbook, however, does not by itself ensure comparability or standardization of information about curriculum and instruction. Only when most or all of the local and State school systems—and the U.S. Office of Education—use the handbook as a basis for records and reports about instructional programs will information that is truly comparable and combinable be available. Then, there will be significant improvement in the quality and usefulness of information about curriculum and instruction. The use of such information, contributing to enhanced knowledge and more effective decisionmaking, should help make better education possible for pupils throughout the Nation.